

09/405,046

Trying 3106016892...Open

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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Dec 17 The CA Lexicon available in the CAPLUS and CA files
NEWS 3 Feb 06 Engineering Information Encompass files have new names
NEWS 4 Feb 16 TOXLINE no longer being updated
NEWS 5 Apr 23 Search Derwent WPINDEX by chemical structure
NEWS 6 Apr 23 PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA

NEWS EXPRESS April 18 CURRENT WINDOWS VERSION IS V6.0,
CURRENT MACINTOSH VERSION IS V5.0C (ENG) AND V5.0JB (JP),
AND CURRENT DISCOVER FILE IS DATED 04/06

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 15:53:53 ON 04 MAY 2001

=> fil reg

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.15 | 0.15 |

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:53:58 ON 04 MAY 2001

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STRUCTURE FILE UPDATES: 3 MAY 2001 HIGHEST RN 334615-05-3

DICTIONARY FILE UPDATES: 3 MAY 2001 HIGHEST RN 334615-05-3

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

09/405,046

Structure search limits have been increased. See HELP SLIMIT
for details.

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=>

Uploading C:\STNEXP4\QUERIES\405046elect.str

L1 STRUCTURE UPLOADED

=> que L1

L2 QUE L1

=> d

L2 HAS NO ANSWERS

L1 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

L2 QUE ABB=ON PLU=ON L1

=> s 12

SAMPLE SEARCH INITIATED 15:54:29 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 104 TO ITERATE

100.0% PROCESSED 104 ITERATIONS

17 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 1469 TO 2691

PROJECTED ANSWERS: 93 TO 587

L3 17 SEA SSS SAM L1

=> s 12 full

FULL SEARCH INITIATED 15:54:38 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1967 TO ITERATE

100.0% PROCESSED 1967 ITERATIONS

434 ANSWERS

SEARCH TIME: 00.00.01

L4 434 SEA SSS FUL L1

=> e gadolinium/cn

E1 1 GADOLINITE-(Y)/CN

E2 1 GADOLINITE-(Y) (BE2FESI2(Y0.5-1CE0-0.5ND0-0.5)2O10)/CN

E3 1 --> GADOLINIUM/CN

E4 1 GADOLINIUM ((ETHYLENEDINITRILO)TETRAACETATO)CADMATE/CN

E5 1 GADOLINIUM

((ETHYLENEDINITRILO)TETRAACETATO)COBALTATE(II)/CN

E6 1 GADOLINIUM ((ETHYLENEDINITRILO)TETRAACETATO)ZINCATE/CN

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E7 1 GADOLINIUM (DIPHOSPHATE) HYDROXIDE (GD5(P2O7)3(OH)3)/CN
E8 1 GADOLINIUM +59 ION/CN
E9 1 GADOLINIUM .ALPHA.-METHYLACRYLATE/CN
E10 1 GADOLINIUM 0-0.6, LANTHANUM 99-100 (ATOMIC)/CN
E11 1 GADOLINIUM 0-0.9, IRON 15, NICKEL 84-85/CN
E12 1 GADOLINIUM 0-0.94, TERBIUM 99.1-100 (ATOMIC)/CN

=> s e3

L5 1 GADOLINIUM/CN

=> fil .search

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

137.67

137.82

FILE 'MEDLINE' ENTERED AT 15:55:00 ON 04 MAY 2001

FILE 'CAPLUS' ENTERED AT 15:55:00 ON 04 MAY 2001

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FILE 'BIOSIS' ENTERED AT 15:55:00 ON 04 MAY 2001

COPYRIGHT (C) 2001 BIOSIS(R)

FILE 'USPATFULL' ENTERED AT 15:55:00 ON 04 MAY 2001

CA INDEXING COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 15:55:00 ON 04 MAY 2001

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=> s l4 and l5

L6 144 L4 AND L5

=> s l6 and (peptide? or polypeptide?)

L7 42 L6 AND (PEPTIDE? OR POLYPEPTIDE?)

=> dup rem l7

PROCESSING COMPLETED FOR L7

L8 40 DUP REM L7 (2 DUPLICATES REMOVED)

=> d ibib ab hitstr l-

YOU HAVE REQUESTED DATA FROM 40 ANSWERS - CONTINUE? Y/(N):y

09/405,046

L8 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 2001:101192 CAPLUS
 DOCUMENT NUMBER: 134:177353
 TITLE: Binding moieties for fibrin
 INVENTOR(S): Wescott, Charles R.; Nair, Shrikumar A.; Kolodziej,
 Andrew; Beltzer, James P.
 PATENT ASSIGNEE(S): Dyax Corp., USA; Epix Medical, Inc.
 SOURCE: PCT Int. Appl., 114 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2001009188 | A1 | 20010208 | WO 2000-US20612 | 20000728 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 PRIORITY APPLN. INFO.: US 1999-146425 P 19990729
 AB The present invention provides binding moieties for fibrin, which have a variety of uses wherever detecting, isolating or localizing fibrin, and particularly fibrin as opposed to fibrinogen, is advantageous. Particularly disclosed are synthetic, isolated polypeptides capable of binding fibrin and recognizing the form of polymd. fibrin found in thrombi. Such polypeptides and disclosed derivs. are useful, e.g., as imaging agents for thrombi. Preferred embodiments useful as magnetic resonance imaging (MRI) contrast agents useful for detecting a thrombus in vivo are also disclosed.
 IT 7440-54-2, Gadolinium, biological studies 60239-18-1, DOTA
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (imaging agent comprising fibrin-binding polypeptides for screening thrombolytic agents and for diagnosing and treating

L8 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 2001:101006 CAPLUS
 DOCUMENT NUMBER: 134:169313
 TITLE: Targeting multimeric imaging agents through multilocus binding
 INVENTOR(S): Lauffer, Randall B.; Mcmurry, Thomas J.; Dumas, Stephane; Kolodziej, Andrew; Amedio, John; Caravan,
 Peter; Zhang, Zhao; Nair, Shrikumar
 PATENT ASSIGNEE(S): Epix Medical, Inc., USA
 SOURCE: PCT Int. Appl., 107 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

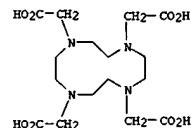
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2001008712 | A2 | 20010208 | WO 2000-US20536 | 20000728 |

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 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 PRIORITY APPLN. INFO.: US 1999-146414 P 19990729
 US 1999-163650 P 19991104
 AB The present invention relates to contrast agents for diagnostic imaging. In particular, this invention relates to novel multimeric compds. which exhibit improved relaxivity properties upon binding to endogenous proteins or other physiol. relevant sites. The compds. consist of: a) two or more Image Enhancing Moieties (IEMs) (or signal-generating moiety) comprising multiple subunits; b) two or more Target Binding Moieties (TBM), providing for in vivo localization and multimer rigidification; c) a scaffold framework for attachment of the above moieties; and d) optional linkers for attachment of the IEMs to scaffold. This invention also relates to pharmaceutical compns. comprising these compds. and to methods of using the compds. and compns. for contrast enhancement of diagnostic

L8 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
 thrombus-assocd. diseases)
 RN 7440-54-2 CAPLUS
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 CAPLUS
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

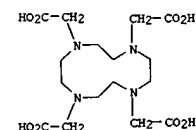


REFERENCE COUNT: 6
 REFERENCE(S):
 (1) Athena Neurosciences Inc; WO 9601644 A1 1996 CAPLUS
 (2) Genentech Inc; WO 9845331 A2 1998 CAPLUS
 (3) Primalco Ltd; WO 9714804 A1 1997 CAPLUS
 (4) Schering Biotech Corporation; EP 0329363 A1 1989
 CAPLUS
 (5) The Regents Of The University Of Michigan; WO 9636361 A1 1996 CAPLUS
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
 imaging.
 IT 7440-54-2DP, Gadolinium, complexes with DTPA derivs.
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (targeting multimeric imaging agents through multilocus binding)
 RN 7440-54-2 CAPLUS
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

IT 60239-18-1D, DOTA, gadolinium-complexed derivs. and conjugates
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (targeting multimeric imaging agents through multilocus binding)
 RN 60239-18-1 CAPLUS
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



09/405,046

L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 1
 ACCESSION NUMBER: 2000:661180 CAPLUS
 DOCUMENT NUMBER: 133:249059
 TITLE: Radionuclide conjugates with DOTA-biotin derivatives
 INVENTOR(S): for diagnosis and therapy
 Serengulam Griffiths, Gary L.; Hansen, Hans; Govindan, V.
 PATENT ASSIGNEE(S): Immunomedics, Inc., USA
 SOURCE: U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 486,166,
 abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 11
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 6120768 | A | 20000919 | US 1997-990843 | 19971215 |
| US 5736119 | A | 19980407 | US 1995-409960 | 19950323 |
| US 5922302 | A | 19990713 | US 1995-440652 | 19950515 |
| WO 9930745 | A2 | 19990624 | WO 1998-US26579 | 19981215 |
| WO 9930745 | A3 | 20000113 | | |

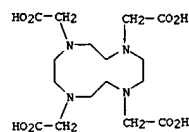
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 AU 9918258 A1 19990705 19981215
 PRIORITY APPLN. INFO.: US 1993-62662 B1 19930517
 US 1995-409960 A2 19950323
 US 1995-486166 B2 19950607
 US 1996-688781 A2 19960731
 US 1997-990843 A1 19971215
 WO 1998-US26579 W 19981215

AB A radionuclide-chelator conjugate compn. for detecting and/or treating lesions in a patient comprises pre-targeting the cell, tissue, or pathogen with a substrate, using a targeting protein that specifically binds a marker substance on the target cell, tissue, or pathogen and to which the

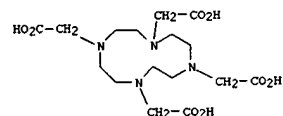
L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 1
 (Continued)
 substrate is directly or indirectly bound. Parenteral injection comprises a chelate conjugate of biotin, a chelator, and a chelatable detection or therapeutic agent, and allows the compn. to accrete at the targeted cell, tissue, or pathogen. The chelate conjugate is purified by liq. chromatog. after chelate formation, or further comprises a blood transit-modifying linker or addend that is covalently bound within the chelate conjugate, or both. The detection or therapeutic agent of the invention are used to detect or treat cancer, infectious diseases, or cardiovascular diseases.
 Prepn. of biotin-D-Phe-D-Lys-DOTA is presented.
 IT 7440-54-2D9, Gadolinium, chelates with DOTA-biotin derivs.
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (radionuclide conjugates contg. DOTA-biotin derivs. for diagnosis and therapy)
 RN 7440-54-2 CAPLUS
 CN Gadolinium (9CI, 9CI) (CA INDEX NAME)

Gd
 IT 60239-18-1, DOTA 200402-64-8
 RL: RCT (Reactant)
 (radionuclide conjugates contg. DOTA-biotin derivs. for diagnosis and therapy)
 RN 60239-18-1 CAPLUS
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 1
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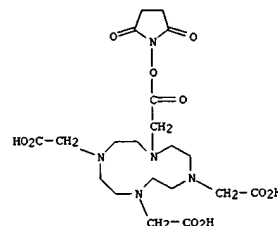
RN 200402-64-8 CAPLUS
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, trisodium salt
 (9CI) (CA INDEX NAME)



● 3 Na

IT 170908-81-3P 192221-17-3P 192221-18-4P
 192221-19-5P 245758-39-8P 294637-28-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (radionuclide conjugates contg. DOTA-biotin derivs. for diagnosis and therapy)
 RN 170908-81-3 CAPLUS
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
 10-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

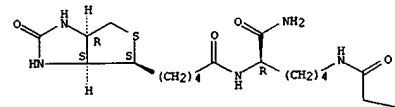
L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 1
 (Continued)



RN 192221-17-3 CAPLUS
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
 10-[2-[(5R)-6-amino-5-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-6-oxohexyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

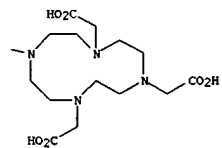


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L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS
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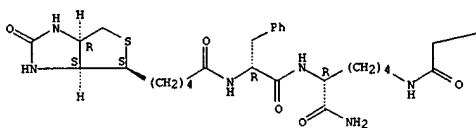
DUPLICATE 1

PAGE 1-B



RN 192221-18-4 CAPLUS
CN D-lysineamide,
N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-D-phenylalanyl-N6-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

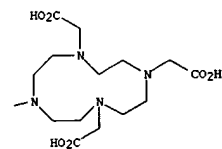
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L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS
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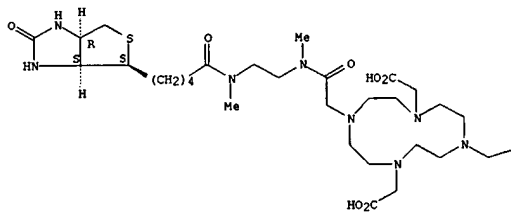
DUPLICATE 1

PAGE 1-B



RN 245758-39-8 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]methylamino]ethyl]methylamino]-2-oxoethyl]- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

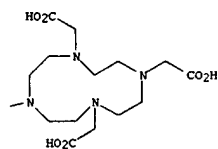
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L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS
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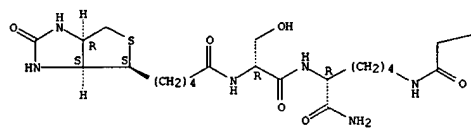
DUPLICATE 1

PAGE 1-B



RN 192221-19-5 CAPLUS
CN D-lysineamide,
N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-D-seryl-N6-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

PAGE 1-A



L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS
(Continued)

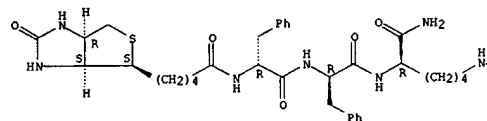
DUPLICATE 1

PAGE 1-B

CO₂H

RN 294637-28-8 CAPLUS
CN D-lysineamide,
N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-D-phenylalanyl-D-phenylalanyl-N6-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

PAGE 1-A

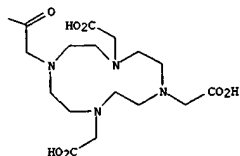


09/405,046

L8 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2001 ACS
(Continued)

DUPLICATE 1

PAGE 1-B

REFERENCE COUNT:
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- 31
(1) Anon; WO 9114458 1991 CAPLUS
(2) Anon; EP 496074 1992 CAPLUS
(3) Anon; WO 9325240 1993 CAPLUS
(4) Anon; WO 9515335 1995 CAPLUS
(5) Bos; Cancer Research 1994, V54, P3479 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:824136 CAPLUS
DOCUMENT NUMBER: 133:366464
TITLE: Macromolecular carrier for drug and diagnostic agent
INVENTOR(S): Versa, David R.
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2000069473 | A2 | 20001123 | WO 2000-US13300 | 20000512 |

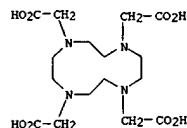
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-134329 P 19990514
AB New macromol. carriers for drugs and diagnostic agents are described that make use of the chem. attachment of new leashes to oligomeric backbone structures. The synthesis of these leashes and their facile creation, reaction and conjugation with chelators and ligands makes them ideal candidates for use in medicine, and esp. diagnostics. E.g., dextran was treated with allyl bromide, then cysteamine and the product then attached to DTPA (chelator) for blood pool imaging via MRI or CT.
IT 7440-54-2DP, Gadolinium, complexes with activated dextran-chelator compds. 60239-18-IDP, Dots, reaction products with activated dextran
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(dextran derivs. for drug and diagnostic agent delivery)
RN 7440-54-2 CAPLUS

L8 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



L8 ANSWER 5 OF 40 USPATFULL

ACCESSION NUMBER: 2000:94681 USPATFULL
TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications
INVENTOR(S): Vedeking, Paul W., Pennington, NJ, United States
Wager, Ruth E., Rockville, MD, United States
Arunachalam, Thangavel, Plainsboro, NJ, United States
States
Ramalingam, Kondareddi, Dayton, NJ, United States
Linder, Karen E., Kingston, NJ, United States
Ranganathan, Ramachandran S., Princeton, NJ, United States
Nunn, Adrian D., Lambertville, NJ, United States
Raju, Natarajan, Kendall Park, NJ, United States
Tweedle, Michael F., Princeton, NJ, United States
Bracco Research USA Inc., Princeton, NJ, United States
PATENT ASSIGNEE(S):
States
(U.S. corporation)

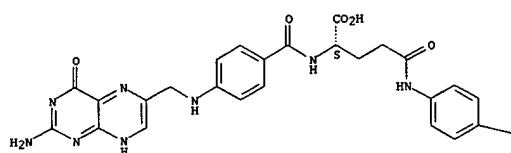
| | NUMBER | DATE |
|-----------------------|--|--------------|
| PATENT INFORMATION: | US 6093382 | 20000725 |
| APPLICATION INFO.: | US 1998-80157 | 19980516 (9) |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Dees, Jose' G. | |
| ASSISTANT EXAMINER: | Jones, Dameron | |
| LEGAL REPRESENTATIVE: | Balogh, Imre | |
| NUMBER OF CLAIMS: | 36 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 8 Drawing Figure(s); 8 Drawing Page(s) | |
| LINE COUNT: | 3756 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or his isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.
IT 251084-37-4P 251084-40-9P 251084-43-2P
(prepn. and reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)
RN 251084-37-4 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[[4-(2-amino-1,4-dihydro-4-oxo-6-pteridiny1)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

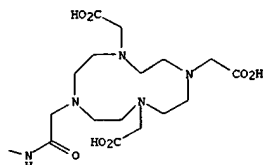
09/405,046

L8 ANSWER 5 OF 40 USPATFULL (Continued)

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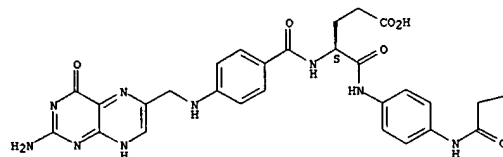
PAGE 1-B



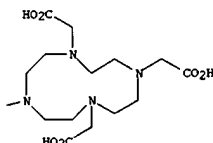
RN 251084-40-9 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10-[2-[[4-[[[(2S)-2-
[[4-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]
]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-oxoethyl]- (9CI) (CA
INDEX NAME)
Absolute stereochemistry.

L8 ANSWER 5 OF 40 USPATFULL (Continued)

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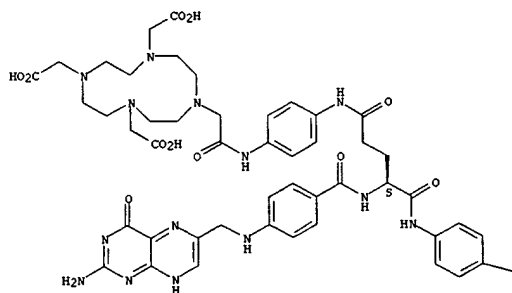
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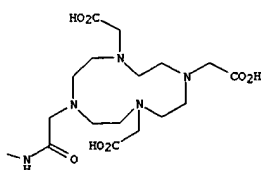
RN 251084-43-2 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10,10'-[[[(2S)-2-[[4-
[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-
1,5-dioxo-1,5-pentenediyl]]bis[(imino-4,1-phenyleneimino(2-oxo-2,1-
ethanediy]]bis- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

L8 ANSWER 5 OF 40 USPATFULL (Continued)

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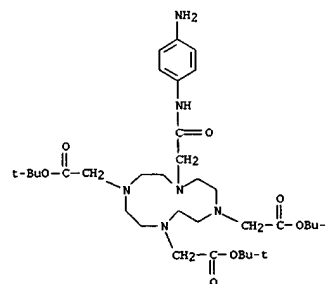


IT 7440-54-2DP, Gadolinium, complexes with folate-derivatized
ligands
(prepn. of metal complexes for use in diagnostic and therapeutic
applications)

L8 ANSWER 5 OF 40 USPATFULL (Continued)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

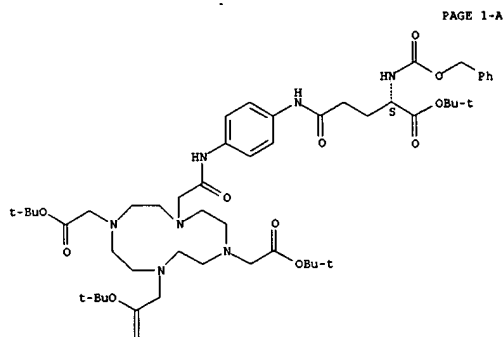
IT 251084-81-8
(reactant for prepn. of metal complexes for use in diagnostic and
therapeutic applications)
RN 251084-81-8 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[4-
aminophenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester (9CI)
(CA INDEX NAME)



IT 251084-53-4P 251084-54-5P 251084-55-6P
251084-56-7P 251084-57-8P 251084-58-9P
251084-59-0P 251084-60-3P 251084-61-4P
251084-62-5P 251084-63-6P 251084-64-7P
(reactant for prepn. of metal complexes for use in diagnostic and
therapeutic applications)
RN 251084-53-4 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10-[2-[[4-[[[(4S)-5-
(1,1-dimethylethoxy)-1,5-dioxo-4-[[[phenylmethoxy]carbonyl]amino]pentyl]
amino]phenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester
(9CI)
(CA INDEX NAME)
Absolute stereochemistry.

09/405,046

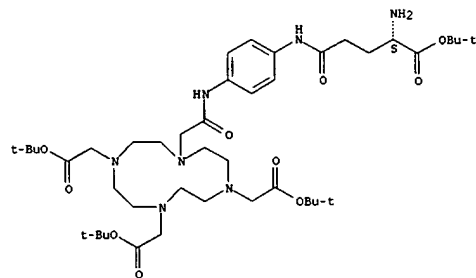
L8 ANSWER 5 OF 40 USPATFULL (Continued)



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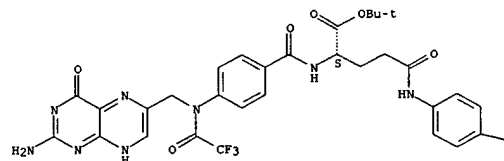
RN 251084-54-5 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10-[2-[[4-[[[(4S)-4-amino-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)
Absolute stereochemistry.

L8 ANSWER 5 OF 40 USPATFULL (Continued)

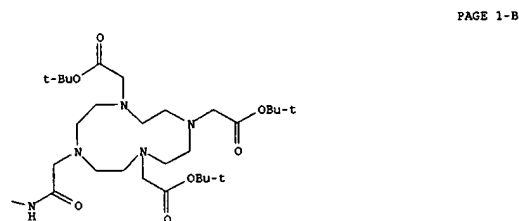


RN 251084-55-6 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10-[2-[[4-[[[(4S)-4-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)
Absolute stereochemistry.

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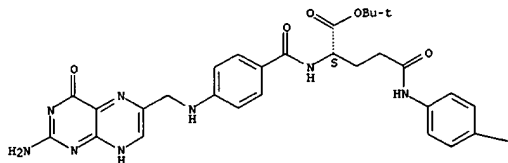


L8 ANSWER 5 OF 40 USPATFULL (Continued)

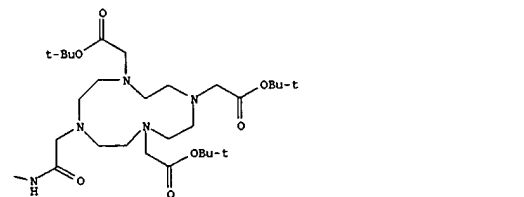


RN 251084-56-7 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10-[2-[[4-[[[(4S)-4-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)
Absolute stereochemistry.

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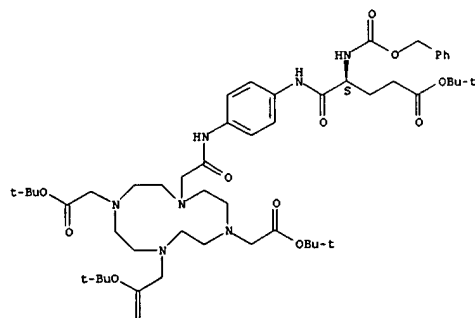


L8 ANSWER 5 OF 40 USPATFULL (Continued)



RN 251084-57-8 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10-[2-[[4-[[[(2S)-5-(1,1-dimethylethoxy)-1,5-dioxo-2-[[[(phenylmethoxy)carbonyl]amino]pentyl]amino]phenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)
Absolute stereochemistry.

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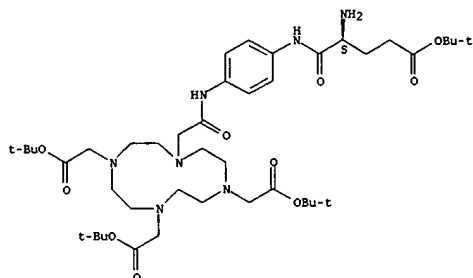
09/405,046

L8 ANSWER 5 OF 40 USPATFULL (Continued)

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RN 251084-58-9 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
 10-[2-[[4-[[[(2S)-2-amino-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

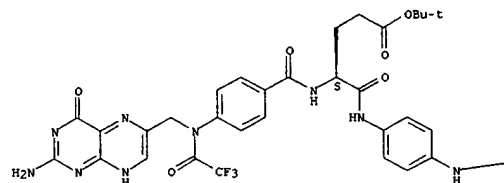


RN 251084-59-0 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
 10-[2-[[4-[[[(2S)-2-[[4-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl](trifluoroacetyl)amino]benzoyl]amino]-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

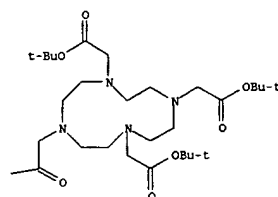
Absolute stereochemistry.

L8 ANSWER 5 OF 40 USPATFULL (Continued)

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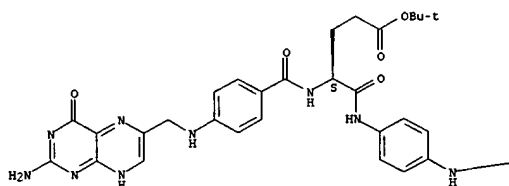


RN 251084-60-3 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
 10-[2-[[4-[[[(2S)-2-[[4-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

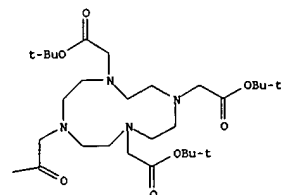
Absolute stereochemistry.

L8 ANSWER 5 OF 40 USPATFULL (Continued)

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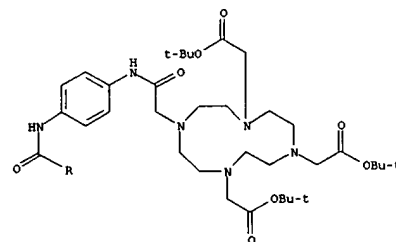


RN 251084-61-4 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
 10,10'-[[[(2S)-1,5-dioxo-2-[[[(phenylmethoxy)carbonyl]amino]-1,5-pentanedyl]]bis[imino-4,1-phenyleneimino(2-oxo-2,1-ethanedyl)]]bis-, hexakis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

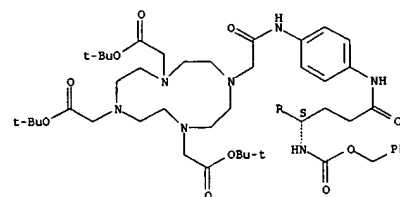
Absolute stereochemistry.

L8 ANSWER 5 OF 40 USPATFULL (Continued)

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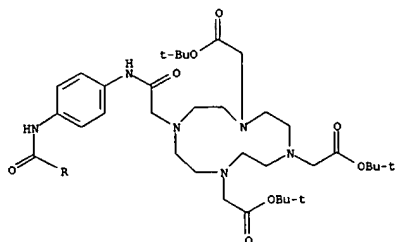
RN 251084-62-5 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
 10,10'-[[[(2S)-2-amino-1,5-dioxo-1,5-pentanedyl]]bis[imino-4,1-phenyleneimino(2-oxo-2,1-ethanedyl)]]bis-, hexakis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

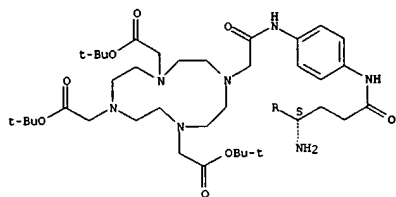
09/405,046

L8 ANSWER 5 OF 40 USPATFULL (Continued)

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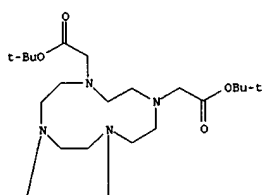
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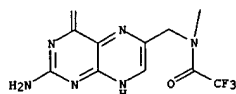
RN 251084-63-6 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10,10'-[[(2S)-2-[[4-
[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl] (trifluoroacetyl)amino]
benzoyl]amino]-1,5-dioxo-1,5-pentanedyl]bis[imino-4,1-phenyleneimino(2-oxo-2,1-ethanedyl)]]bis-, hexakis(1,1-dimethylethyl) ester (9CI)
(CA INDEX NAME)

L8 ANSWER 5 OF 40 USPATFULL (Continued)

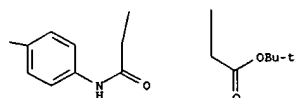
PAGE 1-B



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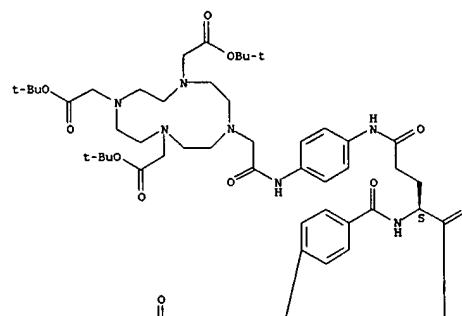


RN 251084-64-7 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10,10'-[[(2S)-2-[[4-
[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-

L8 ANSWER 5 OF 40 USPATFULL (Continued)

Absolute stereochemistry.

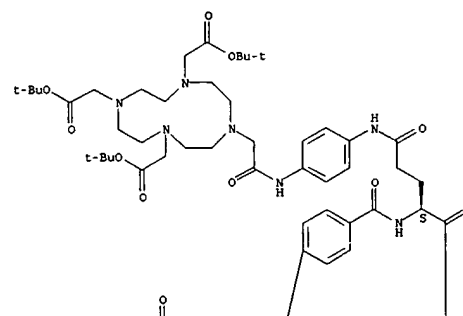
PAGE 1-A



L8 ANSWER 5 OF 40 USPATFULL (Continued)
1,5-dioxo-1,5-pentanedyl]bis[imino-4,1-phenyleneimino(2-oxo-2,1-ethanedyl)]]bis-, hexakis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

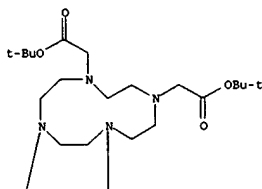
PAGE 1-A



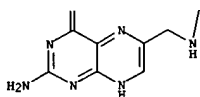
09/405,046

L8 ANSWER 5 OF 40 USPATFULL (Continued)

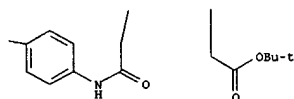
PAGE 1-B



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L8 ANSWER 6 OF 40 USPATFULL

ACCESSION NUMBER: 2000:91563 USPATFULL
 TITLE: Use of polymerized lipid diagnostic agents
 INVENTOR(S): Li, King Chuen, Stanford, CA, United States
 Bednarski, Mark David, Los Altos, CA, United States
 Storrs, Richard Wood, San Diego, CA, United States
 Li, Henry Y., Visalia, CA, United States
 Tropper, Francois Daniel, Toronto, Canada
 Song, Curtis Kang Hoon, Sunnyvale, CA, United States
 States: Sipkins, Dorothy Anna, Palo Alto, CA, United States
 Kuniyoshi, Jeremy Kenji, Cupertino, CA, United States
 STATES: Sipkins, Dorothy Anna, Palo Alto, CA, United States
 Kuniyoshi, Jeremy Kenji, Cupertino, CA, United States
 PATENT ASSIGNEE(S): Targesome, Inc., Palo Alto, CA, United States (U.S. corporation)

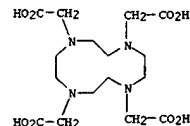
| | NUMBER | DATE |
|-----------------------|---|--------------|
| PATENT INFORMATION: | US 6090408 | 20000718 |
| APPLICATION INFO.: | US 1998-122807 | 19980727 (9) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1996-629056, filed on 8 Apr 1996 which is a continuation-in-part of Ser. No. US 1994-286555, filed on 5 Aug 1994, now patented, | |

Pat. No. US 5512294, issued on 30 Apr 1996
 DOCUMENT TYPE: Utility
 PRIMARY EXAMINER: Kishore, Gollamudi S.
 LEGAL REPRESENTATIVE: Morrison & Foerster LLP
 NUMBER OF CLAIMS: 24
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 37 Drawing Figure(s); 26 Drawing Page(s)
 LINE COUNT: 1530
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Polymerized liposome particles which are linked to a targeting agent and may also be linked to a contrast enhancement agent and/or linked to or encapsulating a treatment agent. The targeting imaging enhancement polymerized liposome particles interact with biological targets holding the image enhancement agent to specific sites providing in vitro and in vivo study by magnetic resonance, radioactive, x-ray or optical imaging of the expression of molecules in cells and tissues during disease and pathology. Targeting polymerized liposomes may be linked to or encapsulate a treatment agent, such as, proteins, drugs or hormones for directed delivery to specific biological sites for treatment.

IT 60239-18-1, 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (synthetic lipids prepd. from targeted polymd. liposome contrast agents)
 RN 60239-18-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX

L8 ANSWER 5 OF 40 USPATFULL (Continued)

L8 ANSWER 6 OF 40 USPATFULL (Continued)
 NAME)



IT 7440-54-2DP, Gadolinium, complexes with synthetic lipids (targeted polymd. liposome contrast agents)
 RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

09/405,046

L8 ANSWER 7 OF 40 USPATFULL
 ACCESSION NUMBER: 2000:27541 USPATFULL
 TITLE: Biomodulators as universal imaging agents
 INVENTOR(S): Born, Jerry L., Albuquerque, NM, United States
 Eshima, Dennis, Albuquerque, NM, United States
 Mann, Paul L., Albuquerque, NM, United States
 Matwyoff, Nicholas A., Albuquerque, NM, United States
 States
 PATENT ASSIGNEE(S): University of New Mexico, Albuquerque, NM, United States (U.S. corporation)
 NUMBER DATE

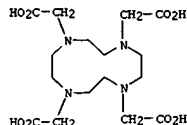
 PATENT INFORMATION: US 6033644 20000307
 APPLICATION INFO.: US 1998-186096 19981105 (9)
 RELATED APPLN. INFO.: Division of Ser. No. US 1995-405017, filed on 16 Mar
 1995, now patented, Pat. No. US 5906807 which is a division of Ser. No. US 1991-694325, filed on 1 May 1991, now patented, Pat. No. US 5401489
 DOCUMENT TYPE: Utility
 PRIMARY EXAMINER: Dees, Jose' G.
 ASSISTANT EXAMINER: Hartley, Michael G.
 LEGAL REPRESENTATIVE: Evans, Judith A. Dovetail Technologies Inc.
 NUMBER OF CLAIMS: 14
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 10 Drawing Figure(s); 9 Drawing Page(s)
 LINE COUNT: 1043
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Biomodulators, optionally linked to imaging-active moieties, can be administered to a host to enhance images thereof, e.g., NMR-, X-ray- or radio-images, preferably by increasing aberrant tissue signal intensity.
 Biomodulators can also condition tissue to enhance uptake of otherwise non-specific imaging agents. When linked to drugs, biomodulators can target the same to particular sites in the body.
 IT 7440-54-2D, Gadolinium, complexes with DTPA-galactose (tissue MRI enhancement with biomodulator and)
 RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

IT 60239-18-1D, DOTA, saccharide conjugates, metal complexes (tissue imaging with, biomodulator enhancement of)
 RN 60239-18-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

L8 ANSWER 8 OF 40 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
 ACCESSION NUMBER: 2000321753 EMBASE
 TITLE: A convenient synthesis of novel bifunctional prochelators
 for coupling to bioactive peptides for radiometal labelling.
 AUTHOR: Eisenwiener K.-P.; Powell P.; Macke H.R.
 CORPORATE SOURCE: H.R. Macke, Division of Radiological Chemistry, Institute of Nuclear Medicine, Department of Radiology, Petersgraben
 4, CH-4031 Basel, Switzerland. hmaecke@uhbs.ch
 SOURCE: Bioorganic and Medicinal Chemistry Letters, (2000) 10/18 (2133-2135).
 Refs: 11
 ISSN: 0960-894X CODEN: BMCLES
 PUBLISHER IDENT.: S 0960-894X(00)00413-3
 COUNTRY: United Kingdom
 DOCUMENT TYPE: Journal Article
 FILE SEGMENT: 014 Radiology
 023 Nuclear Medicine
 037 Drug Literature Index
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 AB New DOTA-based bifunctional prochelators, e.g., 1-(1-carboxy-3-carbotertbutoxypropyl)-4,7,10-(carbotertbutoxymethyl)-1,4,7,10-tetraazacyclododecane (DOTAGA(tBu)4), (6d) for a broad application in the modification of biomolecules with metal ions were prepared. The five-step synthesis of 6d has an overall yield of about 20%. The coupling of 6d to a bioactive peptide on solid-phase was exemplified with use of a CCK-B (cholecystokinin) analogue. (C) 2000 Elsevier Science Ltd.

L8 ANSWER 7 OF 40 USPATFULL (Continued)



L8 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:819407 CAPLUS
 DOCUMENT NUMBER: 132:61087
 TITLE: Membrane-permeant peptide complexes for medical imaging, diagnostics, and pharmaceutical therapy
 INVENTOR(S): Pivnicka-Worms, David
 PATENT ASSIGNEE(S): Washington University, USA
 SOURCE: PCT Int. Appl., 65 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| WO 9967284 | A2 | 19991229 | WO 1999-US13660 | 19990618 |
| WO 9967284 | A3 | 20000406 | | |

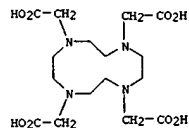
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 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 9946905 A1 20000110 AU 1999-46905 19990618
 EP 1090032 A2 20010411 EP 1999-930351 19990618
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, IE, FI
 PRIORITY APPLN. INFO.: US 1998-90087 P 19980620
 WO 1999-US13660 W 19990618
 AB Methods and compns. for medical imaging, evaluating intracellular processes and components, radiotherapy of intracellular targets, and drug delivery by the use of novel cell membrane-permeant peptide conjugate coordination and covalent complexes having target cell specificity are provided. Kits for conjugating radionuclides and other metals to peptide coordination complexes are also provided.
 IT 7440-54-2D, Gadolinium, complexes of paramagnetic isotopes
 60239-18-1D, DOTA, peptide conjugates, complexes
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (membrane-permeant peptide complexes for medical imaging, diagnostics, and pharmaceutical therapy)
 RN 7440-54-2 CAPLUS
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

09/405,046

L8 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)

Gd

RN 60239-18-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



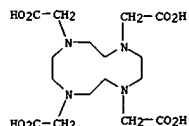
L8 ANSWER 10 OF 40 USPATFULL
ACCESSION NUMBER: 1999:141269 USPATFULL
TITLE: Magnetic resonance imaging agents for the detection of physiological agents
INVENTOR(S): Meade, Thomas, Altadena, CA, United States
Fraser, Scott, La Canada, CA, United States
Jacobs, Russell, Arcadia, CA, United States
Li, Wenhong, Pasadena, CA, United States
PATENT ASSIGNEE(S): Research Corporation Technologies, Tucson, AZ, United States (U.S. corporation)
NUMBER DATE
PATENT INFORMATION: US 5980862 19991109
APPLICATION INFO.: US 1998-134072 19980813 (9)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-460511, filed on 2 Jun 1995, now abandoned Ser. No. Ser. No. US 1995-486968, filed on 7 Jun 1995, now patented, Pat. No. US 5707605 And Ser. No. US 971855

NUMBER DATE
PRIORITY INFORMATION: US 1997-63328 19971027 (60)
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Clardy, S. Mark
ASSISTANT EXAMINER: Jones, Dameron
LEGAL REPRESENTATIVE: Flehr Hohbach Test Albritton & Herbert; Treccartin, Esq., Richard F.; Silva, Esq., Robin M.
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 26 Drawing Figure(s); 15 Drawing Page(s)
LINE COUNT: 2068
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to novel magnetic resonance imaging contrast agents and methods of detecting physiological signals or substances.
IT 7440-54-2b, Gadolinium, chelate complexes contg. covalently-attached blocking moiety (as MRI contrast agents for detection of physiol. agents)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

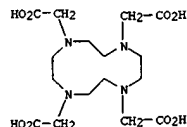
IT 60239-18-1, DOTA
(chelator for prepn. of MRI contrast agents)
RN 60239-18-1 USPATFULL

L8 ANSWER 10 OF 40 USPATFULL (Continued)
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



L8 ANSWER 11 OF 40 USPATFULL
ACCESSION NUMBER: 1999:137312 USPATFULL
TITLE: Water soluble paclitaxel prodrugs
INVENTOR(S): Li, Chun, Missouri City, TX, United States
Wallace, Sidney, Houston, TX, United States
Yu, Dong-Fang, Houston, TX, United States
Yang, David J., Sugar Land, TX, United States
PATENT ASSIGNEE(S): PG-TXL Company, L. P., Houston, TX, United States (U.S. corporation)

NUMBER DATE
PATENT INFORMATION: US 5977163 19991102
APPLICATION INFO.: US 1997-815104 19970311 (8)
NUMBER DATE
PRIORITY INFORMATION: US 1996-13184 19960312 (60)
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Dees, Jose' G.
ASSISTANT EXAMINER: Hartley, Michael G.
LEGAL REPRESENTATIVE: Arnold White & Durkee
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 1268
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are water soluble compositions of paclitaxel and docetaxel formed by conjugating the paclitaxel or docetaxel to a water soluble chelator, polyethylene glycol or polymer such as poly (1-glutamic acid) or poly (1-aspartic acid). Also disclosed are methods of using the compositions for treatment of tumors, auto-immune disorders such as rheumatoid arthritis and for prediction of paclitaxel uptake by tumors and radiolabeled DTPA-paclitaxel tumor imaging. Other embodiments include the coating of implantable stents for prevention of restenosis.
IT 60239-18-1, DOTA
(chelator; water sol. paclitaxel prodrugs)
RN 60239-18-1 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



09/405,046

L8 ANSWER 11 OF 40 USPATFULL (Continued)

IT 7440-54-2, Gadolinium, biological studies
(water sol. paclitaxel prodrugs)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

L8 ANSWER 12 OF 40 USPATFULL

ACCESSION NUMBER: 1999:132199 USPATFULL
TITLE: Dichelants
INVENTOR(S): Carvalho, Joan, Mountain View, CA, United States
Watson, Alan D., Campbell, CA, United States
Fellmann, Jere D., Livermore, CA, United States
Koo, Michael, San Jose, CA, United States
Nymcomed Salutar, Inc., Wayne, PA, United States
PATENT ASSIGNEE(S):
(U.S. corporation)

| NUMBER | DATE |
|--|--------------|
| US 5972307 | 19991026 |
| US 1997-898376 | 19970722 (8) |
| Division of Ser. No. US 1994-226760, filed on 12 Apr | |
| 1994, now patented, Pat. No. US 5650133 which is a continuation-in-part of Ser. No. US 1993-86996, | |
| filed on 7 Jul 1993, now patented, Pat. No. US 5446145 | |
| which is a continuation-in-part of Ser. No. US 1990-468107, | |
| filed on 19 Jan 1990, now patented, Pat. No. US 5281704 | |
| , said Ser. No. US 226760 which is a continuation-in-part of Ser. No. US 1992-885028, | |
| filed on 12 Jun 1992, now abandoned which is a continuation-in-part of Ser. No. US 468107 | |

| NUMBER | DATE |
|---------------|----------|
| GB 1993-20277 | 19931001 |

PRIORITY INFORMATION:
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Dees, Jose' G.
ASSISTANT EXAMINER: Hartley, Michael G.
LEGAL REPRESENTATIVE: Fish & Richardson P.C.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIMS: 1
LINE COUNT: 1802
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to dichelants, in particular compounds having two macrocyclic chelant groups linked by a bridge containing an ester or amide bond, especially compounds of formula Vb ##STR1## (wherein each X which may be the same or different is N2, O or S, at least two Xs being N2;
each Z is a group R.sup.1 or a group CR.sup.1.sub.2 Y, at least one Z,

L8 ANSWER 12 OF 40 USPATFULL (Continued)

and preferably 2 or 3 Zs, on each macrocyclic ring being a group CR.sup.1.sub.2 Y;

each Y is a group CO.sub.2 H, PO.sub.3 H, SO.sub.3 H,
CONR.sup.1.sub.2,
CON(OR.sup.1)R.sup.1, CNS or CONR.sup.1 NR.sup.1.sub.2, preferably COOH;

m is 0 or 1 or 2, preferably 1; each n is 2 or 3, preferably 2; q is 1 or 2, preferably 1;

each R.sup.1 which may be the same or different is a hydrogen atom or an alkyl group optionally substituted by one or more hydroxy and/or alkoxy groups;

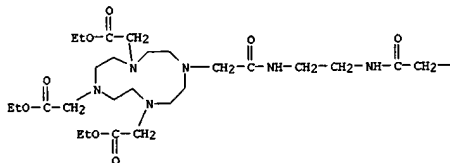
and D is a bridging group having a molecular weight of less than 1000, preferably less than 500, joining two macrocyclic rings via at least one amide or ester bond) and salts and metal chelates thereof.

IT 137076-40-5 137097-99-5
(chelating agent, polychelant)

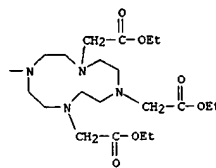
RN 137076-40-5 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-[1,2-ethanediybis(imino(2-oxo-2,1-ethanediy1))]bis-, hexaethyl ester (9CI)

(CA INDEX NAME)

PAGE 1-A

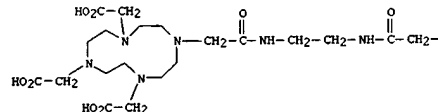


PAGE 1-B

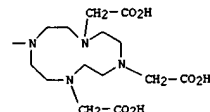


RN 137097-99-5 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-[1,2-ethanediybis(imino(2-oxo-2,1-ethanediy1))]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



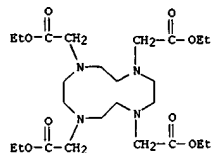
IT 7440-54-2, Gadolinium, reactions
(complexation of, chelating agent for)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

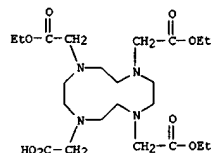
IT 137076-50-7P 137076-51-8P 137076-54-1P
(prepn. of, in polychelant chelating agent prepn.)

09/405,046

L8 ANSWER 12 OF 40 USPATFULL (Continued)
 RN 137076-50-7 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tetraethyl ester (9CI) (CA INDEX NAME)



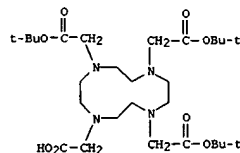
RN 137076-51-8 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, triethyl ester, potassium salt (9CI) (CA INDEX NAME)



● K

RN 137076-54-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

L8 ANSWER 12 OF 40 USPATFULL (Continued)



L8 ANSWER 13 OF 40 USPATFULL
 ACCESSION NUMBER: 1999:116945 USPATFULL
 TITLE: Low viscosity chelating polymers for diagnostic imaging
 INVENTOR(S): Ladd, David L., Wayne, PA, United States
 PATENT ASSIGNEE(S): Nycomed Imaging AS, Norway (non-U.S. corporation)

| | NUMBER | DATE |
|-----------------------|--|--------------|
| PATENT INFORMATION: | US 5958372 | 19990928 |
| APPLICATION INFO.: | US 1994-266835 | 19940628 (8) |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Hollinden, Gary E. | |
| LEGAL REPRESENTATIVE: | Fish & Richardson P.C. | |
| NUMBER OF CLAIMS: | 12 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 4 Drawing Figure(s); 3 Drawing Page(s) | |
| LINE COUNT: | 849 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

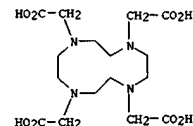
AB Disclosed are linear and cross-linked polymers suitable for use as a contrast agent for magnetic resonance imaging containing units comprising the residue of a poly(amine) moiety linked to a chelating agent and to one or more pendant (poly)alkylene oxides.

IT 7440-54-2D, Gadolinium, chelates with polyamine-polyalkylene oxide-chelating agent 60239-18-1D, DOTA, polyamine-polyalkylene oxide reaction products (chelating polymer prepn. and use as MRI contrast agent)

RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



L8 ANSWER 14 OF 40 USPATFULL
 ACCESSION NUMBER: 1999:69485 USPATFULL
 TITLE: Polychelants containing amide bonds
 INVENTOR(S): Watson, Alan D., Campbell, CA, United States
 PATENT ASSIGNEE(S): Salutar, Inc., Sunnyvale, CA, United States (U.S. corporation)

| | NUMBER | DATE |
|-----------------------|--|--------------|
| PATENT INFORMATION: | US 5914095 | 19990622 |
| APPLICATION INFO.: | US 1991-772349 | 19911007 (7) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. WO 1990-EP9100565, filed on 5 Apr 1990 And Ser. No. US 1990-464865, filed on 16 Jan 1990, now patented, Pat. No. US 5364613 | |
| which | is a continuation-in-part of Ser. No. US 1989-335162, filed on 7 Apr 1989, now abandoned | |

DOCUMENT TYPE: Utility
 PRIMARY EXAMINER: Hollinden, Gary E.
 LEGAL REPRESENTATIVE: Fish & Richardson P.C.
 NUMBER OF CLAIMS: 23
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1338

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There are provided polychelants and their metal chelates which are useful in diagnostic imaging and in radiotherapy and which comprise

a plurality of macrocyclic chelant moieties, e.g. DOTA residues, conjugated to a dendritic polyamine backbone molecule, e.g. a starburst dendrimer. To produce a site-specific polychelate, one or more of the macrocyclic chelant carrying backbone molecules may be conjugated to a site-directed macromolecule, e.g. a protein.

IT 7440-54-2D, Gadolinium, starburst dendritic polymer-macrocyclic chelates 60239-18-1D, conjugates with starburst dendritic polymers, metal complexes 150467-20-2D, conjugates with starburst dendritic polymers, metal complexes 151790-71-5D, conjugates with starburst dendritic polymers, metal complexes (for diagnostic imaging and radiotherapy)

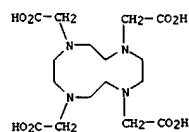
RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

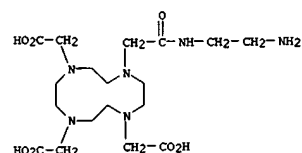
RN 60239-18-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

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L8 ANSWER 14 OF 40 USPATFULL (Continued)

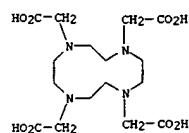


RN 150467-20-2 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(2-aminoethyl)amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)



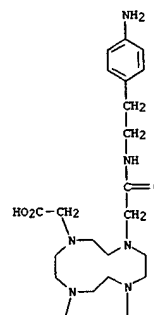
RN 151790-71-5 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[2-(4-aminophenyl)ethyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 14 OF 40 USPATFULL (Continued)



L8 ANSWER 14 OF 40 USPATFULL (Continued)

PAGE 1-A



PAGE 2-A



IT 60239-18-1, DOTA
(reaction of, with iso-Bu chloroformate)
RN 60239-18-1 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

L8 ANSWER 15 OF 40 USPATFULL

ACCESSION NUMBER: 1999:60994 USPATFULL
TITLE: Method of MRI using biomodulators
INVENTOR(S): Born, Jerry L., Albuquerque, NM, United States
Eshima, Dennis, Albuquerque, NM, United States
Mann, Paul L., Albuquerque, NM, United States
Matwiyoff, Nicholas A., Albuquerque, NM, United States
States
PATENT ASSIGNEE(S): University of New Mexico, Albuquerque, NM, United States (U.S. corporation)

| | NUMBER | DATE |
|-----------------------|--|--------------|
| PATENT INFORMATION: | US 5906807 | 19990525 |
| APPLICATION INFO.: | US 1995-405017 | 19950316 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1991-694325, filed on 1 May 1991, now patented, Pat. No. US 5401489, issued on 28 Mar 1995 | |

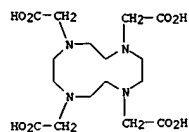
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hollinden, Gary E.
ASSISTANT EXAMINER: Hartley, Michael G.
LEGAL REPRESENTATIVE: Jones & Volentine, L.L.P.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 983
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Biomodulators, optionally linked to imaging-active moieties, can be administered to a host to enhance images thereof, e.g., NMR-, X-ray- or radio-images, preferably by increasing aberrant tissue signal intensity.
Biomodulators can also condition tissue to enhance uptake of otherwise non-specific imaging agents. When linked to drugs, biomodulators can target the same to particular sites in the body.
IT 7440-54-2D, Gadolinium, complexes with DTPA-galactose (tissue MRI enhancement with biomodulator and)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

IT 60239-18-1D, DOTA, saccharide conjugates, metal complexes (tissue imaging with, biomodulator enhancement of)
RN 60239-18-1 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

09/405,046

L8 ANSWER 15 OF 40 USPTFULL (Continued)



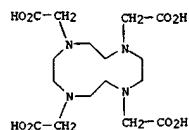
L8 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 2
ACCESSION NUMBER: 1998:623984 CAPLUS
DOCUMENT NUMBER: 129:250213
TITLE: Biotinidase-resistant biotinylated compound and methods of use thereof
INVENTOR(S): Rosebrough, Scott F.
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S., 21 pp. Cont.-in-part of U.S. 5,326,778.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 5807879 | A | 19980915 | US 1994-221113 | 19940331 |
| US 5326778 | A | 19940705 | US 1992-845416 | 19920303 |
| AT 160700 | E | 19971215 | AT 1993-906281 | 19930303 |
| | | | US 1992-845416 | 19920303 |

PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 129:250213
AB The present invention provides biotinylated compds. useful for delivering a mol. to a target site, and methods of making biotinylated compds.
The biotinylated compds. are covalent conjugates of biotin and a diagnostic or therapeutic agent, and are stable to rapid degradn. by biotinidase.
The compds. of the invention are useful for delivering therapeutic or diagnostic agents to target-bound streptavidin or avidin conjugated cell-targeting agents, including monoclonal antibodies. The compd. N-cysteinyl biotin is also provided. One example given is for the prepn. of biotin-cysteine-ethylamine-Bolton Hunter.
IT 7440-54-2D, Gadolinium, complexes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (biotinidase-resistant biotinylated compd.)
RN 7440-54-2 CAPLUS
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

IT 60239-18-1, DOTA
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (chelating agent; biotinidase-resistant biotinylated compd.)
RN 60239-18-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

L8 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 2
(Continued)

L8 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:721606 CAPLUS
DOCUMENT NUMBER: 130:7446
TITLE: Stents with a radioactive surface coating, their production and use for restenosis prevention
INVENTOR(S): Dinkelborg, Ludger; Blume, Friedhelm; Hilger, Christoph-Stephan; Heidmann, Dieter; Platzek, Johannes; Niedballa, Ulrich; Miklautz, Heribert; Speck, Ulrich; Duda, Stephan; Tepe, Gunnar; Noll, Bernhard; Goerner, Heidmarie
PATENT ASSIGNEE(S): Schering A.-G., Germany
SOURCE: PCT Int. Appl., 42 pp.
CODEN: P1XXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 9848851 | A2 | 19981105 | WO 1998-EP2527 | 19980429 |
| WO 9848851 | A3 | 19990422 | | |
| V: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| DE 19724230 | C1 | 19981126 | DE 1997-19724230 | 19970603 |
| DE 19724223 | C1 | 19981224 | DE 1997-19724223 | 19970603 |
| DE 19724229 | C1 | 19990401 | DE 1997-19724229 | 19970603 |
| AU 9879100 | A1 | 19981124 | AU 1998-79100 | 19980429 |
| EP 979108 | A2 | 20000216 | EP 1998-929272 | 19980429 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| NO 9905310 | A | 19991029 | NO 1999-5310 | 19991029 |

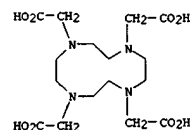
PRIORITY APPLN. INFO.:
AB The surface of a metallic stent is coated with a radioactive metal isotope by chem. deposition (redn. or pptn.) or electrodeposition, or by chelation with a compd. which adheres to the stent (e.g. a peptide or lipid). Alternatively, the stent may be coated electrochem. with Au and then with a SH group-contg. chelate of a radioactive metal, where the SH

09/405,046

L8 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
group-contg. complexing agent adheres to the Au coating. Thus, a
Wiktor
stent was immersed in 1 mL EtOH soln. of 1-[3-[N-(2-
methoxyethyl)octadecylsulfamoyl]-2-hydroxypropyl]-4,7,10-
tris(hydroxycarbonylmethyl)-1,4,7,10-tetraazacyclododecane, 2 mL H₂O
was
added, and the stent was sonicated for 15 min, removed, and dried.
The
coated stent was then immersed in 2 mL 0.9% NaCl soln., 37 MBq
111InCl₃
was added, and the stent was sonicated for 15 min, rinsed in NaCl
soln.,
and dried. The labeled stent had an activity of 1.49 MBq 111In.
IT 7440-54-2D, Gadolinium, radioisotopes
RL: DEV (Device component use); THU (Therapeutic use); BIOL
(Biological
study); USES (Uses)
(coating contg.; stents with radioactive surface coating for
restenosis
prevention)
RN 7440-54-2 CAPLUS
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

IT 60239-18-1D, DOTA, reaction products with hydroxysulfosuccinimide
and aminoundecanethiol, indium-111 complexes 215604-06-1
RL: DEV (Device component use); THU (Therapeutic use); BIOL
(Biological
study); USES (Uses)
(stents with radioactive surface coating for restenosis prevention)
RN 60239-18-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA
INDEX
NAME)



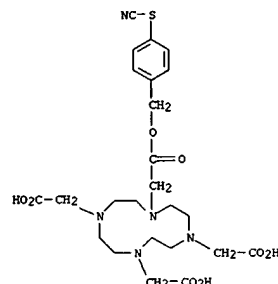
RN 215604-06-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid,

L8 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:542995 CAPLUS
DOCUMENT NUMBER: 129:158579
TITLE: Method using radioactive metal or paramagnetic
metal-labeled neurotensin compounds for the
detection,
localization, and treatment of malignant human
tumors
INVENTOR(S): Reubi, J. C.
PATENT ASSIGNEE(S): Mallinckrodt Medical, Inc., USA
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
Patent
English
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 9833531 | A1 | 19980806 | WO 1998-US1964 | 19980202 |
| W: | AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, ML, MR, NE, SN, TD, TG | | AU 1998-62622 | 19980202 |
| AU 9862622 | A1 | 19980825 | | |
| AU 728712 | B2 | 20010118 | | |
| EP 968001 | A1 | 20000105 | EP 1998-904839 | 19980202 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI | | NO 1999-3846 | 19990810 |
| NO 9903846 | A | 19990909 | EP 1997-200297 | A 19970203 |
| PRIORITY APPLN. INFO.: | | | WO 1998-US1964 | W 19980202 |

OTHER SOURCE(S):
MARPAT 129:158579
AB A method is disclosed for detecting and localizing malignant tumors
and
their metastases in tissues, which in healthy condition and in
non-neoplastic conditions of chronic inflammation do not contain
substantial quantities of neurotensin-receptors, in the body of a
human
being. The method comprises: (i) administering a compn. comprising,
in a
quantity sufficient for external imaging, a (radio)labeled peptide
selected from the group consisting of neurotensin (NT), NT-receptor
agonists, NT-receptor antagonists, NT analogs and NT derivs.; and
thereupon (ii) subjecting said being to external imaging, by
radioactive
scanning or by magnetic resonance imaging, to det. the targeted sites
in
the body. The invention further relates to a method for the
therapeutic

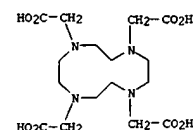
L8 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
mono[(4-thiocyanatophenyl)methyl] ester (9CI) (CA INDEX NAME)



L8 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
treatment of the malignant tumors by administration of the above
peptide, labeled for this purpose, and to the differential-
diagnostic assessment and detection of a specific tumor type (i.e.
ductal
exocrine pancreatic carcinoma) of the pancreas. The invention also
relates to a pharmaceutical compn. to be used for detection, a
pharmaceutical compn. to be used for therapy and to a kit for prep. a
radiopharmaceutical compn.
IT 7440-54-2D, Gadolinium, neurotensin compd. reaction products
60239-18-1D, DOTA, chelates, neurotensin compd. reaction products
RL: BAC (Biological activity or effector, except adverse); BPR
(Biological
process); THU (Therapeutic use); BIOL (Biological study); PROC
(Process);
USES (Uses)
(radioactive metal or paramagnetic metal-labeled neurotensin
compds.
for detection, localization, and treatment of malignant human
tumors)
RN 7440-54-2 CAPLUS
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA
INDEX
NAME)



09/405,046

L8 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:251081 CAPLUS

DOCUMENT NUMBER: 128:318919

TITLE: Integrin-binding compound conjugates with paramagnetic

metal chelators for magnetic resonance imaging of thrombi
INVENTOR(S): Tolley, James O.; Mazur, Paul Curtis; Mullen, DanielG.; Pierschbacher, Michael D.; Tschopp, Juerg
PATENT ASSIGNEE(S): Burnham Institute, USA
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9816256 | A1 | 19980423 | WO 1997-US18412 | 19971015 |
| W: AU, CA, JP | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9747539 | A1 | 19980511 | AU 1997-47539 | 19971015 |
| PRIORITY APPLN. INFO.: US 1996-732043 | | | US 1996-732043 | 19961016 |
| | | | WO 1997-US18412 | 19971015 |

OTHER SOURCE(S): MARPAT 128:318919

AB Magnetic resonance imaging (MRI) contrast agents useful for detecting thrombi are provided. The MRI contrast agents comprise a chelator capable of complexing a paramagnetic metal, which chelator is coupled to a chem.

compd., e.g. a peptide, capable of binding to an integrin. The MRI contrast agent can addnl. contain the paramagnetic metal which complexes with the chelator. Compns. contg. these MRI agents and a physiol. acceptable carrier, as well as the use of such agents to detect

thrombus in a subject, are also provided by the present invention.

IT 7440-54-2D, Gadolinium, chelates, peptide conjugates

60239-18-1D, DOTA, peptide conjugates

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Integrin-binding compd. conjugates with paramagnetic metal

chelators for MRI of thrombi)

RN 7440-54-2 CAPLUS

CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 CAPLUS

L8 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:98351 CAPLUS

DOCUMENT NUMBER: 128:172129

TITLE: Improved detection and therapy of lesions with biotin-chelate conjugates

Griffiths, Gary L.; Hansen, Hans J.; Karacay, Habib

PATENT ASSIGNEE(S): Immunomedics, Inc., USA; Griffiths, Gary L.; Hansen,

Hans J.; Karacay, Habib

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9804293 | A1 | 19980205 | WO 1997-US13285 | 19970731 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, VZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9740474 | A1 | 19980220 | AU 1997-40474 | 19970731 |
| PRIORITY APPLN. INFO.: US 1996-688781 | | | A2 199660731 | |
| | | | WO 1997-US13285 | W 19970731 |

AB An improved method of detecting and/or treating lesions in a patient in

which a pre-targeting approach is used wherein the total amt. of radionuclide delivered to a target cell, tissue, or pathogen is dramatically increased. In this method, the chelate conjugate may be purified by chromatog. after chelate formation, may contain multiple chelates or a blood transit-modifying linker or added within the

chelate conjugate, or both or a combination of these. The improved chelate conjugates can be used as detection of therapeutic agents to detect or treat the targeted cell, tissue, or pathogen.

Biotin-D-Phe-D-Lys-DOTA was prepd. and complexed with gadolinium for MRI.

IT 200402-64-8

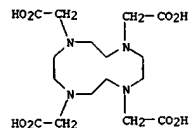
RL: RCT (Reactant)
(detection and therapy of lesions with biotin-chelate conjugates)

RN 200402-64-8 CAPLUS

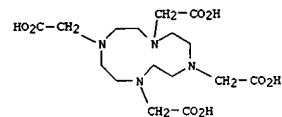
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, trisodium salt
(9CI) (CA INDEX NAME)

L8 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



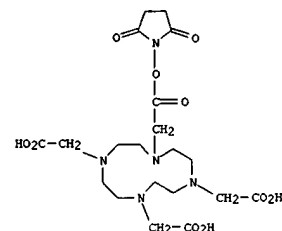
L8 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)



● 3 Na

IT 7440-54-2DP, Gadolinium, complexes with biotin-peptide -chelating agents 170908-81-3P 202932-81-2DP, complexes with radionuclides
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(detection and therapy of lesions with biotin-chelate conjugates)RN 7440-54-2 CAPLUS
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

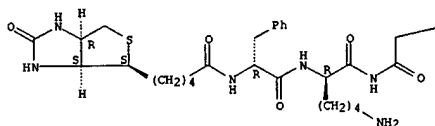
RN 170908-81-3 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)RN 202932-51-2 CAPLUS
CN D-lysineamide, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-D-phenylalanyl-N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-

09/405,046

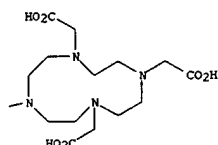
L8 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
tetraazacyclododec-1-yl]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

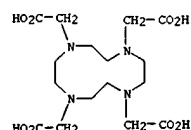
PAGE 1-A



PAGE 1-B



L8 ANSWER 21 OF 40 USPATFULL (Continued)
(chelator for prepn. of MRI contrast agents)
RN 60239-18-1 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



L8 ANSWER 21 OF 40 USPATFULL
ACCESSION NUMBER: 1998:4212 USPATFULL
TITLE: Magnetic resonance imaging agents for the detection of physiological agents
INVENTOR(S): Meade, Thomas, Altadena, CA, United States
Fraser, Scott, Newport Beach, CA, United States
Jacobs, Russell, Arcadia, CA, United States
Research Corporation Technologies, Tucson, AZ, United States (U.S. corporation)

NUMBER DATE
PATENT INFORMATION: US 5707605 19980113
APPLICATION INFO.: US 1995-486968 19950607 (8)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-460511, filed on 2 Jun 1995, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Jones, Dameron L.
LEGAL REPRESENTATIVE: Flehr Hobbach Test Albritton & Herbert LLP; Treccartin, Richard F.; Silva, Robin M.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1320
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to magnetic resonance imaging agents comprising a paramagnetic metal ion bound to a complex wherein said complex comprises a chelator and a blocking moiety covalently attached to said chelator which binds in at least a first coordination site of said metal ion and which is capable of interacting with a target substance such that the exchange of water in at least said first coordination site is increased.
IT 7440-54-2D, Gadolinium, chelate complexes contg. covalently-attached blocking moiety (as MRI contrast agents for detection of physiol. agents)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd
IT 60239-18-1, DOTA

L8 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:672302 CAPLUS
DOCUMENT NUMBER: 127:316334
TITLE: Bioactivated diagnostic imaging contrast agents
INVENTOR(S): Lauffer, Randall B.; McMurtry, Thomas J.; Dunham, Stephen O.; Scott, Daniel M.; Parmelee, David J.; Dumas, Stephane
PATENT ASSIGNEE(S): Epix Medical, Inc., USA
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

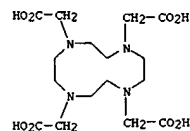
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9736619 | A2 | 19971009 | WO 1997-US4804 | 19970325 |
| WO 9736619 | A3 | 19980129 | | |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, BG, BR, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2247620 | AA | 19971009 | CA 1997-2247620 | 19970325 |
| AU 9725448 | A1 | 19971022 | AU 1997-25448 | 19970325 |
| AU 726914 | B2 | 20001123 | | |
| BR 9708470 | A | 19990413 | BR 1997-8470 | 19970325 |
| EP 907379 | A2 | 19990414 | EP 1997-916974 | 19970325 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| CN 1215341 | A | 19990428 | CN 1997-193542 | 19970325 |
| JP 20000507577 | T2 | 20000620 | JP 1997-535373 | 19970325 |
| NO 9804543 | A | 19981126 | NO 1998-4543 | 19980929 |
| PRIORITY APPLN. INFO.: US 1996-14448 P 19960401 WO 1997-US4804 W 19970325 | | | | |
| AB Improved diagnostic agents for magnetic resonance imaging (MRI) and optical imaging are provided. In particular, this invention relates to MRI and optical imaging agents that allow for the sensitive detection of a specific bioactivity within a tissue. These agents are prodrug contrast agents which are bioactivated in vivo in the presence of the specific bioactivity. This invention also relates to pharmaceutical compns. comprising these agents and to methods of using the agents and compns. comprising the agents. | | | | |

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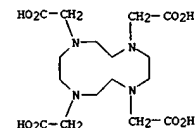
L8 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
 IT 7440-54-2D, Gadolinium, complexes with chelating agents
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (contrast agent image-enhancing moiety; bioactivated diagnostic
 imaging contrast agents and prepn. thereof)
 RN 7440-54-2 CAPLUS
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

IT 60239-18-1, DOTA
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (contrast agent moiety; bioactivated diagnostic imaging contrast
 agents and prepn. thereof)
 RN 60239-18-1 CAPLUS
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA
 INDEX NAME)



L8 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
 proviso that Xbb can only be Pyr when n = 0; Xcc, Xdd = Met, Leu,
 Nle;; R2
 = OH, acetoxy, amino; and thereupon (ii) subjecting said being to
 external imaging, by radioactive scanning or by magnetic resonance
 imaging, to det. the targeted sites in the body. Also provided is a
 method for the therapeutic treatment of malignant tumors by
 administration
 of the above-defined peptide, labeled for this purpose. Further
 provided are a method for labeling of the peptide compds., a
 pharmaceutical compn. to be used for detection, a pharmaceutical
 compn. to
 be used for therapy, and a kit for prepn. a radiopharmaceutical compn.
 The ligands of the invention specifically recognize CCK-B receptors.
 The
 methodol. of the invention is useful for detection of tumors which are
 difficult to characterize, e.g. small-cell lung carcinoma and
 medullary
 thyroid carcinoma.
 IT 60239-18-1D, DOTA, peptide conjugates
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (labeled CCK-B receptor ligands for detection, localization, and
 treatment of tumors, and prepn. thereof)
 RN 60239-18-1 CAPLUS
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA
 INDEX NAME)



IT 7440-54-2, Gadolinium, biological studies
 RL: BFR (Biological process); THU (Therapeutic use); BIOL (Biological
 study); PROC (Process); USES (Uses)
 (peptide labeled with labeled CCK-B receptor ligands for
 detection, localization, and treatment of tumors, and prepn.
 thereof)
 RN 7440-54-2 CAPLUS
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

L8 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1997:594650 CAPLUS
 DOCUMENT NUMBER: 127:259530
 TITLE: Use of labeled CCK-B receptor ligands for the
 detection, localization, and treatment of
 malignant human tumors
 INVENTOR(S): Reubi, Jean-Claude
 PATENT ASSIGNEE(S): Mallinckrodt Medical, Inc., USA; Reubi,
 Jean-Claude
 SOURCE: PCT Int. Appl., 61 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--------|----------|-----------------|----------|
| WO 9731657 | A2 | 19970904 | WO 1997-US3056 | 19970225 |
| WO 9731657 | A3 | 19971023 | | |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, | | | | |
| PT, SE | | | | |
| CA 2247430 | AA | 19970904 | CA 1997-2247430 | 19970225 |
| EP 885017 | A2 | 19981223 | EP 1997-908751 | 19970225 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, | | | | |
| PT, | | | | |
| | IE, FI | | | |
| JP 2000506141 | T2 | 20000523 | JP 1997-531108 | 19970225 |
| PRIORITY APPLN. INFO.: | | | EP 1996-200498 | 19960227 |
| | | | WO 1997-US3056 | 19970225 |

OTHER SOURCE(S): MARPAT 127:259530
 AB A method is provided for detecting and localizing malignant tumors and
 their metastases in tissues, which in healthy condition do not contain
 disturbing quantities of CCK-receptors, in the body of a human being,
 which comprises (i) administering a compn. comprising, in a quantity
 sufficient for external imaging, a labeled peptide derived from
 H-(Xaa)n-(Xbb)m-Tyr-Xcc-Gly-Trp-Xdd-Asp-Phe-R2, or an acid amide
 thereof,
 formed between a free amino group of an amino acid moiety and R1COOH,
 [R1
 = C1-3 alkanoyl, arylcarbonyl, aryl-(C1-3)alkanoyl group; or a lactam
 thereof, formed between a free amino group of an amino acid moiety
 and a
 free CO2H group of another amino acid moiety; or a conjugate thereof
 with
 avidin or biotin; (Xaa)n = 0-25 amino acid moieties selected from
 Ala,
 Leu, Asn, Dpr, Gln, Glu, Ser, Ile, Met, His, Asp, Lys, Gly, Thr, Pro,
 Pyl,
 Arg, Tyr, Trp, Val, Phe; m = 0, 1; Xbb = Asp, Dpr, Glu or Pyr, with
 the

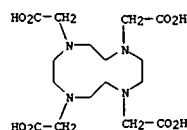
L8 ANSWER 24 OF 40 USPATFULL
 ACCESSION NUMBER: 97:96997 USPATFULL
 TITLE: Linear oligomeric polychelant compounds
 INVENTOR(S): Love, David B., Wayne, PA, United States
 Dow, William C., Wayne, PA, United States
 Himmelsbach, Richard J., Wayne, PA, United States
 Watson, Alan D., Wayne, PA, United States
 Rocklage, Scott M., Wayne, PA, United States
 PATENT ASSIGNEE(S): Salutar, Inc., Sunnyvale, CA, United States (U.S.
 corporation)
 NUMBER DATE
 PATENT INFORMATION: US 5679810 19971021
 APPLICATION INFO: US 1995-480056 19950607 (8)
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-86996,
 filed
 on 7 Jul 1993, now patented, Pat. No. US 5446146
 which
 is a division of Ser. No. US 1990-468107, filed on
 19
 Jan 1990, now patented, Pat. No. US 5281704
 DOCUMENT TYPE: Utility
 PRIMARY EXAMINER: Gupta, Yogendra N.
 LEGAL REPRESENTATIVE: Fish & Richardson PC
 NUMBER OF CLAIMS: 12
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1846
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Linear oligomer polychelant compounds and chelates formed therewith
 have
 alternating chelant and linker moieties bound together by amide or
 ester
 moieties. The compounds have between 3 and 100 chelant moieties, at
 least one of which complexes a paramagnetic metal ion. The
 polychelants
 and especially their paramagnetic metal polychelates are
 particularly
 suitable for diagnostic imaging.
 IT 7440-54-2DP, Gadolinium, linear oligomeric polychelant
 polyaminocarboxylate complexes
 (prepn. for diagnostic imaging)
 RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

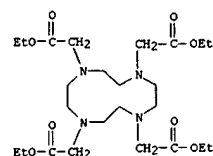
IT 60239-18-1, 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic
 acid
 (prepn. of linear oligomeric polychelant polyaminocarboxylic acids
 and
 their paramagnetic metal chelates for diagnostic imaging)
 RN 60239-18-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA
 INDEX NAME)

09/405,046

L8 ANSWER 24 OF 40 USPATFULL (Continued)
NAME)



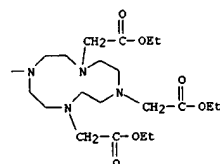
IT 137076-50-7P 137076-51-8P
(prepn. of linear oligomeric polychelant polyaminocarboxylic acids
and their paramagnetic metal chelates for diagnostic imaging)
RN 137076-50-7 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tetraethyl
ester (9CI) (CA INDEX NAME)



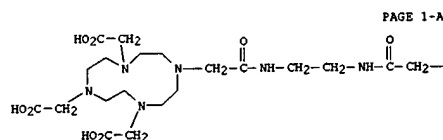
RN 137076-51-8 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, triethyl
ester, potassium salt (9CI) (CA INDEX NAME)

L8 ANSWER 24 OF 40 USPATFULL (Continued)

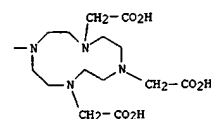
PAGE 1-B



RN 137097-99-5 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-(1,2-
ethanediylbis[imino(2-oxo-2,1-ethanediyl)])bis- (9CI) (CA INDEX
NAME)



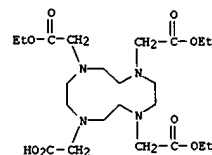
PAGE 1-A



PAGE 1-B

RN 197728-80-6 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10',10'''-
[nitrilotris[2,1-ethanediylimino(2-oxo-2,1-ethanediyl)]]tris- (9CI)
(CA INDEX NAME)

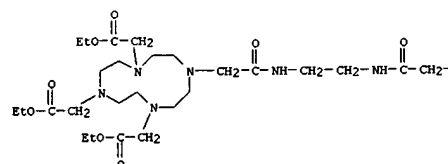
L8 ANSWER 24 OF 40 USPATFULL (Continued)



● K

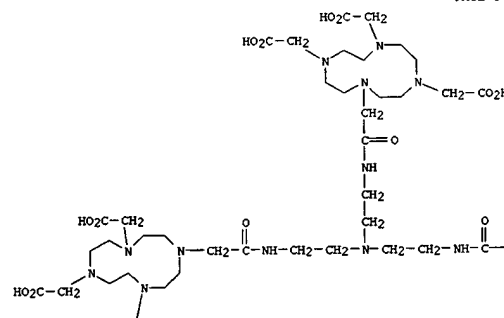
IT 137076-40-5P 137097-99-5P 197728-80-6P
197728-81-7P
(prepn. of linear oligomeric polychelant polyaminocarboxylic acids
and their paramagnetic metal chelates for diagnostic imaging)
RN 137076-40-5 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-(1,2-
ethanediylbis[imino(2-oxo-2,1-ethanediyl)])bis-, hexaethyl ester
(9CI) (CA INDEX NAME)

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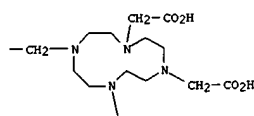


L8 ANSWER 24 OF 40 USPATFULL (Continued)

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PAGE 1-B





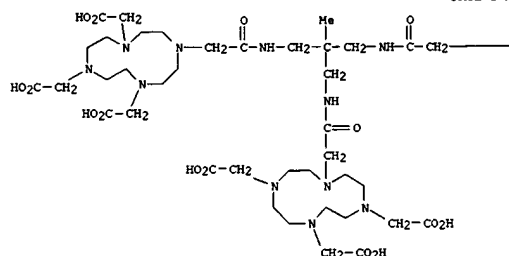
PAGE 2-A



PAGE 2-B

RN 197728-81-7 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,
10,10'-[[2-methyl-2-
[[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-
yl]acetyl]amino]methyl]-1,3-propanediyl]bis[imino(2-oxo-2,1-
ethanedivyl)]bis- (9CI) (CA INDEX NAME)

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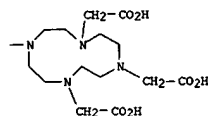


L8 ANSWER 25 OF 40 USPATFULL
 ACCESSION NUMBER: 97:88724 USPATFULL
 TITLE: In vivo agents comprising cationic metal chelators
 with
 acidic saccharides and glycosaminoglycans
 INVENTOR(S): Ranney, David F., Dallas, TX, United States
 PATENT ASSIGNEE(S): Access Pharmaceuticals, Inc., Dallas, TX, United
 States
 (U.S. corporation)

| | NUMBER | DATE |
|-----------------------|---|--------------|
| PATENT INFORMATION: | US 5672334 | 19970930 |
| APPLICATION INFO.: | US 1992-160085 | 19931129 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1992-880660, | |
| filed | on 8 May 1992, now abandoned Ser. No. Ser. No. US | |
| | 1991-863595, filed on 9 Dec 1991, now patented, | |
| Pat. | No. US 5214661 And a continuation-in-part of Ser. | |
| No. | US 1991-642033, filed on 16 Jan 1991, now patented, | |
| | Pat. No. US 5336762 | |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Hollinden, Gary E. | |
| LEGAL REPRESENTATIVE: | Arnold, White & Durkee | |
| NUMBER OF CLAIMS: | 33 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 53 Drawing Figure(s); 53 Drawing Page(s) | |
| LINE COUNT: | 2220 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB This application concerns novel agents comprising cationic or chemically basic metal chelators in association with hydrophilic carriers of anionic or chemically acidic saccharides, sulfatoids and glycosaminoglycans. In certain embodiments, the agents comprise metals and metal ions. Covalent and non-covalent chemical and physical means are described for stabilizing the binding of the metal chelators to the carriers. Novel non-covalently bound compositions are described which give uniquely high payloads and ratio of metal chelator to carrier, ranging from a low of about 15% metal chelator by weight, to a characteristic range of 70% to 90% metal chelator by weight.
 Specific embodiments are described comprising deferoxamine, ferrioxamine, iron-basic porphine, iron-triethylenetetraamine, gadolinium DTPA-lysine, gadolinium DOTA-lysine and gadolinium with basic derivatives of porphyrins, porphines, expanded porphyrins, texaphyrins and sapphyrins as the basic or cationic metal chelators, which are in turn, bound to acidic or anionic carriers, including one or more of acidic or anionic

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L8 ANSWER 25 OF 40 USPATFULL (Continued)
saccharides, and including sulfated sucrose, pentosan polysulfate, dermatan sulfate, oversulfated dermatan sulfate, chondroitin sulfate, oversulfated chondroitin sulfate, heparan sulfate, beef heparin, porcine heparin, non-anticoagulant heparins, and other native and modified acidic saccharides and glycosaminoglycans.

Also disclosed are methods of enhancing in vivo images arising from induced magnetic resonance signals, methods of enhancing in vivo images in conjunction with ultrasound or X-rays and methods of obtaining in vivo body images utilizing radioisotope containing agents. Methods of treating vascular disease are also disclosed.

treating vascular disease are also disclosed:
 IT 7440-54-2D, Gadolinium, chelates, conjugates with acidic
 saccharides and glycosaminoglycans 60239-18-1D, DOTA, basic or
 amine derivs., metal chelates, conjugates with acidic saccharides and
 glycosaminoglycans
 (metal-ion chelates with acidic saccharides and glycosaminoglycans,
 agent prepn., and methods of enhancing MRI imaging)

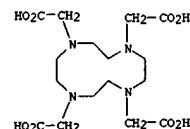
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

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RN      60239-18-1  USPATFULL
CN      1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA
INDEX
      NAME)

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09/405,046

L8 ANSWER 26 OF 40 USPATFULL
 97:75803 USPATFULL
 TITLE: Iodinated paramagnetic chelates, and their use as contrast agents
 INVENTOR(S): Uggeri, Fulvio, Milan, Italy
 Anelli, Pier Lucio, Milan, Italy
 Fedeli, Franco, Milan, Italy
 Murru, Marcella, Milan, Italy
 De Haen, Christoph, Milan, Italy
 Dibra S.p.A., Milan, Italy (non-U.S. corporation)

| | NUMBER | DATE |
|---------------------|----------------|--------------------------|
| PATENT INFORMATION: | US 5660814 | 19970826 |
| | WO 9427644 | 19941208 |
| APPLICATION INFO.: | US 1995-448476 | 19950530 (8) |
| | WO 1994-EP1677 | 19940525 |
| | | 19950530 PCT 371 date |
| | | 19950530 PCT 102(a) date |

| | NUMBER | DATE |
|-----------------------|----------------|----------|
| PRIORITY INFORMATION: | IT 1993-MI1155 | 19930602 |
| | IT 1993-MI1274 | 19930615 |

DOCUMENT TYPE: Utility
 PRIMARY EXAMINER: Kight, John
 ASSISTANT EXAMINER: Jones, Dameron L.
 LEGAL REPRESENTATIVE: Bucknam and Archer
 NUMBER OF CLAIMS: 15
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1420

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel compounds containing a polyiodinated aromatic or heteroaromatic residue and their chelate complexes with ions of metal elements with atomic number from 20 to 31, 39, from 42 to 44, 49 and from 57 to

83, and their salts with physiologically tolerable organic and inorganic bases are useful contrast agents for preparation of diagnostic formulations to obtain images of organs and/or tissues of human and animal body through the use of nuclear magnetic resonance or X-rays

or the combination of both nuclear magnetic resonance and X-rays.

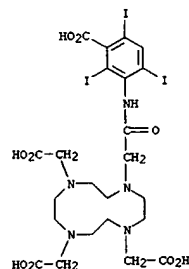
IT 160982-30-9P (prepn. of polyiodinated paramagnetic lanthanide chelates as NMR imaging contrast agents)

RN 160982-30-9 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid,

10-[2-[(3-carboxy-2,4,6-triiodophenyl)amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 26 OF 40 USPATFULL (Continued)



IT 7440-54-2P, Gadolinium, biological studies 160982-30-9DP, gadolinium complexes 160982-31-0DP, lanthanide complexes 160982-32-1DP, gadolinium complexes 160982-33-2DP, gadolinium complexes 160982-34-3DP, gadolinium complexes (prepn. of polyiodinated paramagnetic lanthanide chelates as NMR imaging contrast agents)

RN 7440-54-2 USPATFULL

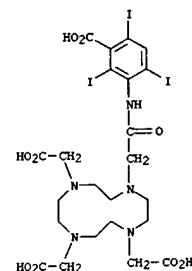
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 160982-30-9 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(3-carboxy-2,4,6-triiodophenyl)amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

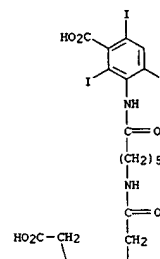
L8 ANSWER 26 OF 40 USPATFULL (Continued)



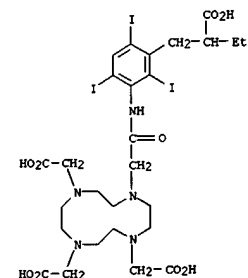
RN 160982-31-0 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(3-(2-carboxybutyl)-2,4,6-triiodophenyl)amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 26 OF 40 USPATFULL (Continued)

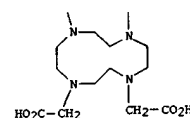


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RN 160982-32-1 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[6-[(3-carboxy-2,4,6-triiodophenyl)amino]-6-oxohexyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)



RN 160982-33-2 USPATFULL

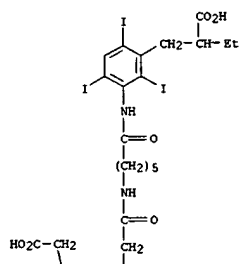
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[6-[(3-(2-carboxybutyl)-2,4,6-triiodophenyl)amino]-6-oxohexyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

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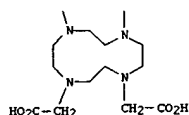
09/405,046

L8 ANSWER 26 OF 40 USPATFULL (Continued)

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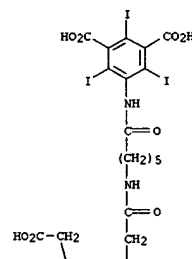
PAGE 2-A



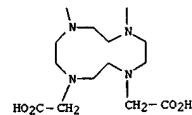
RN 160982-34-3 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[[6-[(3,5-dicarboxy-2,4,6-triiodophenyl)amino]-6-oxohexyl]amino]-2-oxoethyl]-(9CI) (CA INDEX NAME)

L8 ANSWER 26 OF 40 USPATFULL (Continued)

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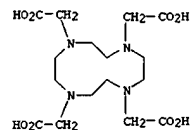
L8 ANSWER 27 OF 40 USPATFULL

ACCESSION NUMBER: 97:3510 USPATFULL
 TITLE: Medical compositions
 INVENTOR(S): Bogdanov, Alexei A., Newton, MA, United States
 Brady, Thomas J., Winchester, MA, United States
 The General Hospital Corporation, Boston, MA,
 United States (U.S. corporation)
 PATENT INFORMATION: US 5593658 19970114
 APPLICATION INFO.: US 1994-250635 19940527 (8)
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-940590, filed on
 4 Sep 1992, now abandoned
 DOCUMENT TYPE: Utility
 PRIMARY EXAMINER: Hollinden, Gary E.
 LEGAL REPRESENTATIVE: Fish & Richardson P.C.
 NUMBER OF CLAIMS: 32
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 14 Drawing Figure(s); 9 Drawing Page(s)
 LINE COUNT: 1331
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB A biocompatible medical composition including a polymeric carrier, a
 protective chain linked to the polymeric carrier, and a reporter
 group linked to the carrier or to the carrier and the protective chain.
 The invention also relates to a method of treating a disease in a
 patient by administering to the patient a therapeutically effective amount of
 the composition, and may include scanning the patient using an imaging
 technique which can detect the reporter group to obtain a visible
 image of the distribution of the composition.
 IT 7440-54-2D, Gadolinium, adducts with graft copolymer and platinum
 compd. 60239-18-1D, 1,4,7,10-Tetraazacyclododecane-
 N,N',N'',N'''-tetraacetic acid, adducts with graft copolymer and
 platinum compd. (graft copolymer-platinum compd. adduct prepn. and therapeutic use)
 RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA
 INDEX NAME)

L8 ANSWER 27 OF 40 USPATFULL (Continued)



09/405,046

L8 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:371854 CAPLUS
DOCUMENT NUMBER: 125:29270
TITLE: Diagnostic imaging contrast agent containing
several
detection groups per molecule
INVENTOR(S): Ohtaka, Akiharu; Sugino, Hideki; Hashiguchi, Yuji;
Seri, Shigemir; Iwai, Kumiko
PATENT ASSIGNEE(S): Nihon Medi-Physics Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 13 pp.
CODING: EPXXXX
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 709100 | A1 | 19960501 | EP 1995-114718 | 19950919 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE | | | | |
| AU 9532834 | A1 | 19960418 | AU 1995-32834 | 19950922 |
| AU 692590 | B2 | 19980611 | | |
| JP 08151336 | A2 | 19960611 | JP 1995-273486 | 19950927 |
| CA 2159530 | AA | 19960331 | CA 1995-2159530 | 19950929 |
| CA 2160052 | AA | 19970407 | CA 1995-2160052 | 19951006 |
| EP 766968 | A1 | 19970409 | EP 1995-115758 | 19951006 |
| EP 766968 | B1 | 20010117 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE | | | | |
| AT 198713 | E | 20010215 | AT 1995-115758 | 19951006 |
| AU 9533189 | A1 | 19970417 | AU 1995-33189 | 19951011 |
| AU 699499 | B2 | 19981203 | | |

PRIORITY APPL. INFO.: JP 1994-261817 A 19940930
EP 1995-115758 A 19951006

AB A diagnostic imaging agent is disclosed which comprises an oligomer metal complex compd. having mol. wt. of 1000-10,000 and having 2-10 functional groups reactive with a bifunctional ligand, wherein .gtoreq.1 kind of and .gtoreq.2 bifunctional ligands are coupled to the org. compd., the org. compd., after coupling to bifunctional ligands, having .gtoreq.1 hydroxyl group, and the org. compd. being coordinated with .gtoreq.1 kind of and .gtoreq.2 metal ions. Prepn. of e.g. OPl-DTPA-Gd is described (OPl is synthetic peptide Pyr-Lys-Arg-Pro-Ser-Gln-Arg-Ser-Lys-Tyr-Leu). The oligomer metal complex compds. of the invention have remarkable relaxation time shortening effects.
IT 7440-54-2D, Gadolinium, oligomer complexes 60239-10-1D, metal complexes, oligomer conjugates
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(diagnostic imaging contrast agent oligomer metal complex compds. with

L8 ANSWER 29 OF 40 USPATFULL
ACCESSION NUMBER: 96:82819 USPATFULL
TITLE: Adducts of macrocyclic chelants
INVENTOR(S): Sieving, Paul F., San Jose, CA, United States
Watson, Alan D., Campbell, CA, United States
PATENT ASSIGNEE(S): Nycomed Salutar, Inc., Wayne, PA, United States
(U.S. corporation)

| | NUMBER | DATE |
|----------------------|--|--------------|
| PATENT INFORMATION: | US 5554748 | 19960910 |
| APPLICATION INFO.: | US 1993-175989 | 19931230 (8) |
| RELATED APPL. INFO.: | Division of Ser. No. US 1990-494865, filed on 16 Jan | |

1990, now patented, Pat. No. US 5364613 which is a continuation-in-part of Ser. No. US 1989-335162,

filed on 7 Apr 1989, now abandoned

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Datlow, Philip I.
LEGAL REPRESENTATIVE: Fish & Richardson P.C.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIMS: 1
LINE COUNT: 1172

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There are provided polychelants and their metal chelates which are useful in diagnostic imaging and in radiotherapy and which comprise

a plurality of macrocyclic chelant moieties, e.g. DOTA residues, conjugated to a polyamine backbone molecule, e.g. polylysine. To

produce a site-specific polychelate, one or more of the macrocyclic chelant carrying backbone molecules may be conjugated to a site-directed macromolecule, e.g. a protein. For example, adducts of a macrocyclic chelant can be formed by the process of (a) dispersing a carboxylic macrocyclic chelant in a polar, anhydrous solvent, (b) adding a base with a pKa sufficient to remove all carboxyl protons to create an

amine salt of the chelant soluble in the solvent, (c) chilling the

reaction mixture to between about 5.degree. C. and 55.degree. C. above the freezing point of the solvent, and (d) adding substantial equimolar amount of chilled alkylhaloformate under anhydrous conditions so as

to form a slurry containing the mixture carboxycarbonic anhydride of the chelant.

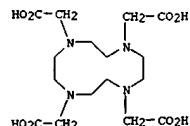
IT 134314-07-7D, reaction product with polylysine (polychelate, site-specific, for medicine)

RN 134314-87-7 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, monoanhydride
with (2-aminoethyl)carbamic acid (9CI) (CA INDEX NAME)

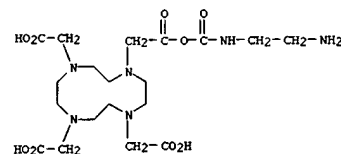
L8 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
several detection groups per mol., and their prepn.)
RN 7440-54-2 CAPLUS
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-10-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

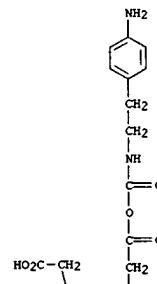


L8 ANSWER 29 OF 40 USPATFULL (Continued)



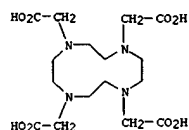
IT 134314-04-4D, reaction product with polylysine (polychelate, site-specific, for radiotherapy and radioimaging)
RN 134314-84-4 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, monoanhydride
with [2-(4-aminophenyl)ethyl]carbamic acid (9CI) (CA INDEX NAME)

PAGE 1-A



09/405,046

L8 ANSWER 31 OF 40 USPATFULL (Continued)
NAME)



IT 7440-54-2DP, Gadolinium, complexes with synthetic lipids
(targeted polymd. liposome contrast agents)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

L8 ANSWER 31 OF 40 USPATFULL
ACCESSION NUMBER: 95:78284 USPATFULL
TITLE: Polychelant compounds
INVENTOR(S): Love, David B., Campbell, CA, United States
Dow, William C., Fremont, CA, United States
Himmelsbach, Richard J., Pleasanton, CA, United States
States
Watson, Alan D., Campbell, CA, United States
Rocklage, Scott M., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Mycomed Salutar, Inc., Sunnyvale, CA, United States
(U.S. corporation)

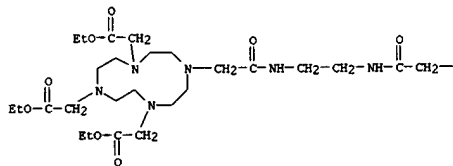
| NUMBER | DATE |
|-----------------------|--|
| US 5446145 | 19950829 |
| US 1993-86996 | 19930707 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1990-468107, filed on 19 Jan |

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Shah, Mukund J.
ASSISTANT EXAMINER: Gupta, Y. N.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
LINE COUNT: 1718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There are disclosed polychelant compounds, that is multi-site metal chelating agents, and chelates formed therewith. The polychelants and especially their paramagnetic metal, heavy metal or radioactive metal polychelates are particularly suitable for use in diagnostic imaging, heavy metal detoxification or radiotherapy. The polychelants have a linear or branched oligomeric structure comprising alternating chelant and linker moieties bound together by amide or ester moieties the carbonyl groups whereof being adjacent the chelant moieties, each polychelant comprising at least two said chelant moieties capable of complexing a metal ion.

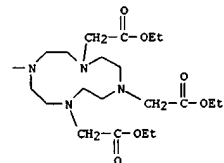
IT 137076-40-5 137097-99-5
(chelating agent, polychelant)
RN 137076-40-5 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-[1,2-ethanediylbis(imino(2-oxo-2,1-ethanediyl))]bis-, hexaethyl ester (9CI)
(CA INDEX NAME)

L8 ANSWER 31 OF 40 USPATFULL (Continued)

PAGE 1-A

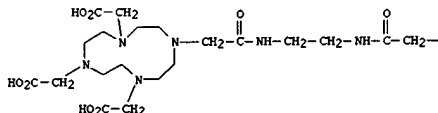


PAGE 1-B



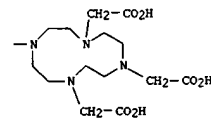
RN 137097-99-5 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-[1,2-ethanediylbis(imino(2-oxo-2,1-ethanediyl))]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



L8 ANSWER 31 OF 40 USPATFULL (Continued)

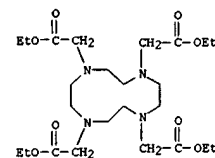
PAGE 1-B



IT 7440-54-2, Gadolinium, reactions
(complexation of, chelating agent for)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

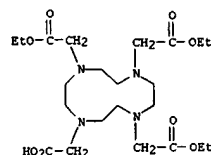
IT 137076-50-7P 137076-51-8P 137076-54-1P
(prepn. of, in polychelant chelating agent prepn.)
RN 137076-50-7 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tetraethyl ester (9CI) (CA INDEX NAME)



RN 137076-51-8 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, triethyl ester, potassium salt (9CI) (CA INDEX NAME)

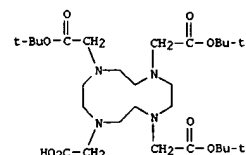
09/405,046

L8 ANSWER 31 OF 40 USPATFULL (Continued)

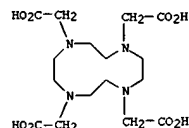


• X

RN 137076-54-1 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid,
tri(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L8 ANSWER 32 OF 40 USPATFULL (Continued)
(9CI) (CA INDEX NAME)



• 2 K

IT 7440-54-2DP, Gadolinium, macrocycle complexes
(prepn. of, for complex prepn. for medical imaging agents)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

L8 ANSWER 32 OF 40 USPATFULL
ACCESSION NUMBER: 95:45333 USPATFULL
TITLE: Nitrogen-containing cyclic ligands, metallic complexes
INVENTOR(S): Schaefer, Michel, Chilly-Mazarin, France
Doucet, Didier, Livry-Gargan, France
Bonnemain, Bruno, Villeparisis, France
Meyer, Dominique, Paris, France
Paris, Dominique, Aulnay-Sous-Bois, France
PATENT ASSIGNEE(S): Guerbet S.A., Villepinte, France (non-U.S. corporation)

| NUMBER | DATE |
|-----------------------|---|
| US 5417960 | 19950523 |
| US 1994-191461 | 19940203 (8) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1991-730050, filed on 15 Jul 1991, now abandoned which is a division of US 1989-421592, filed on 16 Oct 1989, now patented, Pat. No. US 5049667 which is a continuation-in-part of Ser. No. US 1988-181056, filed on 13 Apr 1988, now abandoned |

| NUMBER | DATE |
|---------------|----------|
| FR 1987-5288 | 19870414 |
| FR 1988-13585 | 19881014 |

PRIORITY INFORMATION:

DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Hollinden, Gary E.

LEGAL REPRESENTATIVE: Jacobson, Price, Holman & Stern

NUMBER OF CLAIMS: 33

EXEMPLARY CLAIM: 1

LINE COUNT: 1170

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject of the invention is nitrogen-containing cyclic ligands and metal complexes formed by these ligands, the uses of these complexes as magnetic resonance imaging (MRI) agents, as X-ray contrast agents and as chemical shift reagents in vivo.

IT 119929-05-4P (prepn. and reaction of, in complex prepn. for medical imaging agents)

RN 119929-05-4 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, dipotassium salt

L8 ANSWER 33 OF 40 USPATFULL
ACCESSION NUMBER: 95:33907 USPATFULL
TITLE: Hybrid magnetic resonance contrast agents
INVENTOR(S): Unger, Evan C., 13365 E. Camino La Cebadilla, Tucson, AZ, United States 85749
Wu, Guanli, 2601 W. Aiden St., Tucson, AZ, United States 85745

| NUMBER | DATE |
|----------------|--------------|
| US 5407657 | 19950418 |
| US 1994-202807 | 19940228 (8) |

PATENT INFORMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.:

on 22 Sep 1992

DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Acquah, Samuel A.

LEGAL REPRESENTATIVE: Durando, Antonio R.; Weiss, Harry M.

NUMBER OF CLAIMS: 87

EXEMPLARY CLAIM: 1

LINE COUNT: 1485

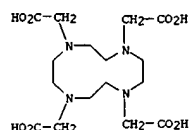
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel MRI contrast agents that comprise one or more metal-ion chelates in juxtaposition with one or more free-radical nitroxide compounds in a polymeric or oligomeric molecule. Both the chelate units and the free radical units may, independently, be inside the main chain of the polymer or in a side chain of the linkage portion of the polymer. The number of combined units of chelates and free radicals in the polymer or oligomer is at least two.

IT 60239-18-1, DOTA (polymeric mols. contg. chelate moieties and nitroxide moieties as hybrid MRI agents, and their prepn.)

RN 60239-18-1 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



IT 7440-54-2D, Gadolinium, complexes with hybrid polymers contg. chelating agents and nitroxides

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L8 ANSWER 33 OF 40 USPATFULL (Continued)
(polymeric mols. contg. chelate moieties and nitroxide moieties as
hybrid MRI agents, and their prepn.)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

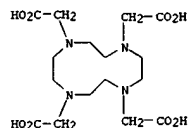
L8 ANSWER 34 OF 40 USPATFULL
ACCESSION NUMBER: 95127057 USPATFULL
TITLE: Biomodulators as universal imaging agents
INVENTOR(S): Born, Jerry L., Albuquerque, NM, United States
Eshima, Dennis, Albuquerque, NM, United States
Mann, Paul L., Albuquerque, NM, United States
Matwyloff, Nicholas A., Albuquerque, NM, United States
States
PATENT ASSIGNEE(S): University of New Mexico, Albuquerque, NM, United States (U.S. corporation)

| | NUMBER | DATE |
|--|---|--------------|
| PATENT INFORMATION: | US 5401489 | 19950328 |
| APPLICATION INFO.: | US 1991-694325 | 19910501 (7) |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Stoll, Robert L. | |
| ASSISTANT EXAMINER: | Covert, John M. | |
| LEGAL REPRESENTATIVE: | Hillen, White, Zelano, & Branigan | |
| NUMBER OF CLAIMS: | 12 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 8 Drawing Figure(s); 8 Drawing Page(s) | |
| LINE COUNT: | 1040 | |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. | | |
| AB | Biomodulators, optionally linked to imaging-active moieties, can be administered to a host to enhance images thereof, e.g., NMR-, X-ray- or radio-images, preferably by increasing aberrant tissue signal intensity. Biomodulators can also condition tissue to enhance uptake of otherwise non-specific imaging agents. When linked to drugs, biomodulators can target the same to particular sites in the body. | |
| IT | 7440-54-2D, Gadolinium, complexes with DTPA-galactose (tissue MRI enhancement with biomodulator and) | |
| RN | 7440-54-2 USPATFULL | |
| CN | Gadolinium (8CI, 9CI) (CA INDEX NAME) | |

Gd

IT 60239-18-1D, DOTA, saccharide conjugates, metal complexes
(tissue imaging with, biomodulator enhancement of)
RN 60239-18-1 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)

L8 ANSWER 34 OF 40 USPATFULL (Continued)

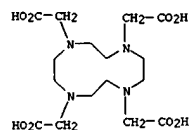


L8 ANSWER 35 OF 40 USPATFULL
ACCESSION NUMBER: 94:99669 USPATFULL
TITLE: Polychelants containing macrocyclic chelant moieties
INVENTOR(S): Sieving, Paul F., 3166 Impala Dr. #5, San Jose, CA, United States 95117
Watson, Alan D., 262A Rincon Ave., Campbell, CA, United States 95008
Quay, Steven C., 428 Oakmead Pkwy., Sunnyvale, CA, United States 94086
Rocklage, Scott M., 255 Cresci Rd., Los Gatos, CA, United States 95030

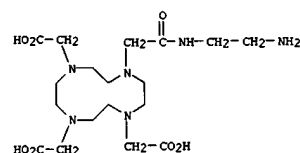
| | NUMBER | DATE |
|--|--|--------------|
| PATENT INFORMATION: | US 5364613 | 19941115 |
| APPLICATION INFO.: | US 1990-464865 | 19900116 (7) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1989-335162, filed on 7 Apr 1989, now abandoned | |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Michl, Paul R. | |
| ASSISTANT EXAMINER: | Yoon, Tae H. | |
| LEGAL REPRESENTATIVE: | Lyon & Lyon | |
| NUMBER OF CLAIMS: | 33 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 1352 | |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. | | |
| AB | There are provided polychelants and their metal chelates which are useful in diagnostic imaging and in radiotherapy and which comprise a plurality of macrocyclic chelant moieties, e.g. DOTA residues, conjugated to a polyamine backbone molecule, e.g. polylysine. To produce a site-specific polychelate, one or more of the macrocyclic chelant carrying backbone molecules may be conjugated to a site-directed macromolecule, e.g. a protein. | |
| IT | 60239-18-1D, DOTA, reaction products with amine group-contg. backbone 150467-20-2D, reaction products with amine group-contg. backbone 160363-61-1D, reaction products with amine group-contg. backbone (polychelants contg. macrocyclic chelant moieties for use in radiotherapy and diagnostic imaging) | |
| RN | 60239-18-1 USPATFULL | |
| CN | 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME) | |

09/405,046

L8 ANSWER 35 OF 40 USPATFULL (Continued)

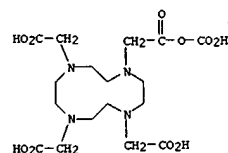


RN 150467-20-2 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(2-aminoethyl)amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

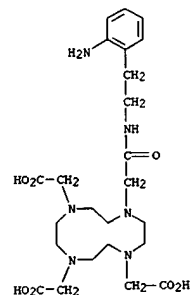


RN 160363-61-1 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[[2-(aminophenyl)ethyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 35 OF 40 USPATFULL (Continued)



L8 ANSWER 35 OF 40 USPATFULL (Continued)



IT 7440-54-2DP, Gadolinium, complexes with polylysine-polyDOTA
160363-62-2P
(polychelants contg. macrocyclic chelant moieties for use in radiotherapy and diagnostic imaging, and their prepn.)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 160363-62-2 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, monoanhydride with carbonic acid (9CI) (CA INDEX NAME)

L8 ANSWER 36 OF 40 USPATFULL

ACCESSION NUMBER: 94:68850 USPATFULL
TITLE: Polychelating agents for image and spectral enhancement (and spectral shift)
INVENTOR(S): Ranney, David F., Dallas, TX, United States
PATENT ASSIGNEE(S): Access Pharmaceuticals, Inc., Dallas, TX, United States (U.S. corporation)
NUMBER DATE

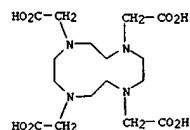
PATENT INFORMATION: US 5336762 19940809
APPLICATION INFO.: US 1991-642033 19910116 (7)
DISCLAIMER DATE: 20091013
RELATED APPLN. INFO.: Division of Ser. No. US 1987-86692, filed on 7 Aug 1987, now abandoned which is a continuation-in-part of Ser. No. US 1985-799757, filed on 18 Nov 1985, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lovering, Richard D.
ASSISTANT EXAMINER: Covert, John M.
LEGAL REPRESENTATIVE: Arnold, White & Durkee
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
LINE COUNT: 2147
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention includes an image-enhancing agent comprising a biodegradable, water-soluble polymer, synthetic or naturally derived and having repeating hydrophilic monomeric units with amino or hydroxyl groups. This agent also includes chelating agents comprising functional groups bound to an amino or hydroxyl group of the monomeric units. These chelating agents have a formation constant for divalent or trivalent metal cations of at least about 10^{sup.8} at physiological temperature and pH. This image-enhancing agent is biodegradable to intermediary metabolites, excretable chelates, oligomers, monomers or combinations thereof of low toxicity. These image-enhancing agents may further comprise a paramagnetic metal ion for enhancement of the image arising from induced magnetic resonance signals. Images resulting from scanning of gamma particle emissions may be enhanced when the image-enhancing agent of the present invention comprises radioisotopic metal ions emitting gamma particles. The physical conversion of these image-enhancing agents into microspheres (or, less optimally, microaggregates) allows further internal directioning of the image-enhancing agents to organs with phagocytic capabilities. Dextran is a preferred polymer; DTPA and gadolinium are respectively preferred chelating agents and paramagnetic metal ions.

09/405,046

L8 ANSWER 36 OF 40 USPATFULL (Continued)
 IT 7440-54-2B, Gadolinium, complexes with polymer-chelating agents
 60239-18-1D, conjugates with polymers and metal ions
 (as image-enhancement agents)
 RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



L8 ANSWER 37 OF 40 USPATFULL
 ACCESSION NUMBER: 94:7797 USPATFULL
 TITLE: Polychelant compounds
 INVENTOR(S): Love, David B., Campbell, CA, United States
 Dow, William C., Fremont, CA, United States
 Himmelsbach, Richard J., Pleasanton, CA, United States
 States
 Watson, Alan D., Campbell, CA, United States
 Rocklage, Scott M., Los Gatos, CA, United States
 PATENT ASSIGNEE(S): Salutar, Inc., Sunnyvale, CA, United States (U.S. corporation)

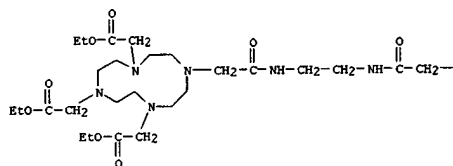
| | NUMBER | DATE |
|---------------------|----------------|--------------|
| PATENT INFORMATION: | US 5281704 | 19940125 |
| APPLICATION INFO.: | US 1990-468107 | 19900119 (7) |

| | NUMBER | DATE |
|-----------------------|-----------------|----------|
| PRIORITY INFORMATION: | GB 1989-23843 | 19891023 |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Shah, Mukund J. | |
| ASSISTANT EXAMINER: | Ward, E. C. | |
| NUMBER OF CLAIMS: | 25 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 1759 | |

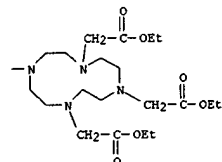
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB There are disclosed polychelant compounds, that is multi-site metal chelating agents, and chelates formed therewith. The polychelants and especially their paramagnetic metal, heavy metal or radioactive metal polychelates are particularly suitable for use in diagnostic imaging, heavy metal detoxification or radiotherapy. The polychelants have a linear or branched oligomeric structure comprising alternating chelant and linker moieties bound together by amide or ester moieties the carbonyl groups whereof being adjacent the chelant moieties, each polychelant comprising at least two said chelant moieties capable of complexing a metal ion.
 IT 137076-40-5 137097-99-5 (chelating agent, polychelant)
 RN 137076-40-5 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-(1,2-ethanediylbis[imino(2-oxo-2,1-ethanediyl)])bis-, hexaethyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 37 OF 40 USPATFULL (Continued)

PAGE 1-A

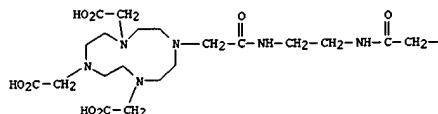


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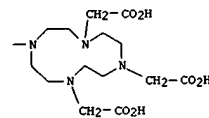
RN 137097-99-5 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-(1,2-ethanediylbis[imino(2-oxo-2,1-ethanediyl)])bis- (9CI) (CA INDEX NAME)

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L8 ANSWER 37 OF 40 USPATFULL (Continued)

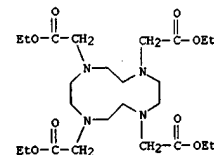
PAGE 1-B



IT 7440-54-2, Gadolinium, reactions
 (complexation of, chelating agent for)
 RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

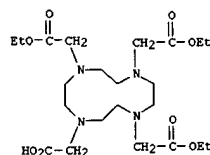
IT 137076-50-7P 137076-51-8P 137076-54-1P
 (prepn. of, in polychelant chelating agent prepn.)
 RN 137076-50-7 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tetraethyl ester (9CI) (CA INDEX NAME)



RN 137076-51-8 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, triethyl ester, potassium salt (9CI) (CA INDEX NAME)

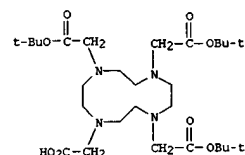
09/405,046

L8 ANSWER 37 OF 40 USPATFULL (Continued)



● K

RN 137076-54-1 USPATFULL
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid,
tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L8 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:620702 CAPLUS
DOCUMENT NUMBER: 119:220702
TITLE: Dendrimeric polychelants as imaging agents
INVENTOR(S): Watson, Alan D.
PATENT ASSIGNEE(S): Cockbain, Julian Roderick Michaelson, UK; Nycomed Salutar, Inc.
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
Patent:
DOCUMENT TYPE: English
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

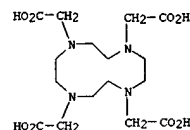
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|----------|
| WO 9306868 | A1 | 19930415 | WO 1992-EP2308 | 19921006 |
| W: | AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, | | | |
| NO, | PL, RO, RU, SD, US | | | |
| BF, | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, | | | |
| | BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG | | | |
| AU 9226757 | A1 | 19930503 | AU 1992-26757 | 19921006 |
| AU 671601 | B2 | 19960905 | | |
| EP 607222 | A1 | 19940727 | EP 1992-920822 | 19921006 |
| EP 607222 | B1 | 19981223 | | |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE | | | |
| JP 07503031 | T2 | 19950330 | JP 1992-506624 | 19921006 |
| AT 174800 | E | 19990115 | AT 1992-920822 | 19921006 |
| PRIORITY APPLN. INFO.: | | | US 1991-772349 | 19911007 |
| | | | WO 1992-EP2308 | 19921006 |
| AB | Polyvalent chelating agents, comprising multiple macrocyclic chelating moieties conjugated to a .ltoreq.5th-generation dendrimer backbone, and their metal chelates are useful in diagnostic imaging and radiotherapy. To produce a site-specific agent, .gtoreq.1 of the chelating agent-carrying backbone mols. may be conjugated to a site-directed mol., e.g. a protein. Thus, Me acrylate reacted with NH3-MeOH to form N(CH2CH2CO2Me)3, which combined with H2NCH2CH2NH2 to form a 1st-generation polyaminoamido starburst dendrimer; further generations were produced by alternate reaction of the product with Me acrylate and H2NCH2CH2NH2. A 2nd-generation dendrimer was coupled to 12 equiv. of DOTA carboxycarbonic anhydride, complexed with Gd, and conjugated via succinimidyl 4-(N-maleimidomethyl)cyclohexane-1-carboxylate to 2-aminothioliolane-activated antibody L6. IT 7440-54-2D, Gadolinium, starburst dendritic polymer-macrocylic | | | |

L8 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)
chelates 60239-18-1D, conjugates with starburst dendritic polymers, metal complexes 150467-20-2D, conjugates with starburst dendritic polymers, metal complexes 151790-71-5D, conjugates with starburst dendritic polymers, metal complexes RL: BIOL (Biological study)
(for diagnostic imaging and radiotherapy)

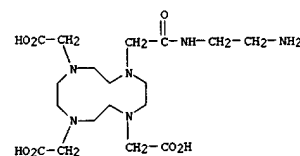
RN 7440-54-2 CAPLUS
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



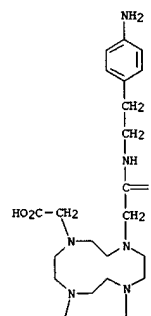
RN 150467-20-2 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(2-aminoethyl)amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)



RN 151790-71-5 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(2-aminophenyl)ethyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)

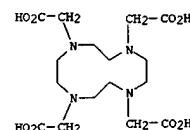
PAGE 1-A



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IT 60239-18-1, DOTA
RL: RCT (Reactant)
(reaction of, with iso-Bu chloroformate)
RN 60239-18-1 CAPLUS
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



09/405,046

L8 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2001 ACS (Continued)

L8 ANSWER 39 OF 40 USPATFULL
 ACCESSION NUMBER: 92:84972 USPATFULL
 TITLE: Polychelating agents for image and spectral enhancement
 (and spectral shift)
 INVENTOR(S): Ranney, David F., Dallas, TX, United States
 PATENT ASSIGNEE(S): Access Pharmaceuticals Inc., Dallas, TX, United States
 (U.S. corporation)

| | NUMBER | DATE |
|-----------------------|--|--------------|
| PATENT INFORMATION: | US 5155215 | 19921013 |
| APPLICATION INFO.: | US 1990-613465 | 19901107 (7) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1985-799757, filed on 18 Nov 1985, now abandoned | |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Maples, John S. | |
| LEGAL REPRESENTATIVE: | Arnold, White & Durkee | |
| NUMBER OF CLAIMS: | 22 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 1589 | |

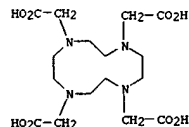
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention includes an image-enhancing agent comprising a biodegradable, water-soluble polymer, synthetic or naturally derived and having repeating hydrophilic monomeric units with amino or hydroxyl groups. This agent also includes chelating agents comprising functional groups bound to an amino or hydroxyl group of the monomeric units. These chelating agents have a formation constant for divalent or trivalent metal cations of at least about 10.sup.8 at physiological temperature and pH. This image-enhancing agent is biodegradable to intermediary metabolites, excretable chelates, oligomers, monomers or combinations thereof of low toxicity.
 These image-enhancing agents may further comprise a paramagnetic metal ion for enhancement of the image arising from induced magnetic resonance signals.
 Images resulting from scanning of gamma particle emissions may be enhanced when the image-enhancing agent of the present invention comprise radioisotopic metal ions emitting gamma particles.
 The physical conversion of these image enhancing agents into microspheres allows further internal directioning of the image-enhancing

L8 ANSWER 39 OF 40 USPATFULL (Continued)
 agents to organs with phagocytic capabilities.

Dextran is a preferred polymer DTPA and gadolinium are respectively preferred chelating agents and paramagnetic metal ions.
 IT 7440-54-2D, Gadolinium, complexes with polymer-chelating agents
 60239-18-1D, conjugates with polymers and metal ions
 (as image-enhancement agents)
 RN 7440-54-2 USPATFULL
 CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd

RN 60239-18-1 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)



L8 ANSWER 40 OF 40 USPATFULL
 ACCESSION NUMBER: 91:75813 USPATFULL
 TITLE: Nitrogen-containing cyclic ligands
 INVENTOR(S): Schaefer, Michel, Chilly-Mazarin, France
 Doucet, Didier, Livry-Gargan, France
 Bonnemain, Bruno, Villeparisis, France
 Meyer, Dominique, Paris, France
 Paris, Dominique, Aulnay-Sous-Bois, France
 Guerbet S.A., Villepinte, France (non-U.S. corporation)

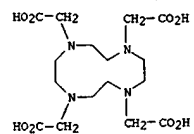
| | NUMBER | DATE |
|-----------------------|--|--------------|
| PATENT INFORMATION: | US 5049667 | 19910917 |
| APPLICATION INFO.: | US 1989-421592 | 19891016 (7) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1988-181056, filed on 13 Apr 1988, now abandoned | |

| | NUMBER | DATE |
|-----------------------|----------------------------------|----------|
| PRIORITY INFORMATION: | FR 1987-5288 | 19870414 |
| | FR 1988-13585 | 19881014 |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Springer, David B. | |
| LEGAL REPRESENTATIVE: | Wegner, Cantor, Mueller & Player | |
| NUMBER OF CLAIMS: | 12 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 1159 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The subject of the invention is nitrogen-containing cyclic ligands and metal complexes formed by these ligands, the uses of these complexes as magnetic resonance imaging (MRI) agents, as X-ray contrast agents and as chemical shift reagents in vivo.
 IT 119929-05-4P (prepn. and reaction of, in complex prepn. for medical imaging agents)
 RN 119929-05-4 USPATFULL
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, dipotassium salt
 (9CI) (CA INDEX NAME)

09/405,046

L8 ANSWER 40 OF 40 USPATFULL (Continued)



● 2 K

IT 7440-54-ZDP, Gadolinium, macrocycle complexes
(prepn. of, for complex prepn. for medical imaging agents)
RN 7440-54-2 USPATFULL
CN Gadolinium (8CI, 9CI) (CA INDEX NAME)

Gd